## STOCK MARKET SIMULATION

An Interactive Qualifying Project Report
Submitted to the faculty
of the

## WORCESTER POLYTECHNIC INSTITUTE

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Degree of Bachelor of Science
by

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#### Abstract

The goal of this project was to examine and become fluent with the volatile stock market through the analysis and implementation of three trading methods: long term fundamental, short term technical, and swing trading. The trading methods were divided among the members, researched, and then implemented in a ten-week trading session. Simulation results were analyzed using numerical and graphical tools. Experiences gained will be valuable for future investments.


## Acknowledgement

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## 1. Introduction

### 1.1 Objective \& Outline

The goal of this project is to gain a better understanding of the stock market through the use of several different trading methods. First, we will discuss the history and give an introduction to the stock market. Then, our team will split into two groups of two people each and conduct a ten-week stock trading simulation using 4 different trading methods. In one group (Jorge, Nick), each partner will have $\$ 50,000$ to invest using short term technical analysis, and $\$ 50,000$ to invest using growth investing. In the other group, one partner (Karl) will invest \$100,000 using long term fundamental analysis while the other (Vannak) will invest $\$ 50,000$ in swing trading. At the end of the simulation, we will analyze and compare the outcome of the 4 different trading methods and see which method brings the best profit. Our trading will be monitored through numbers and graphs. Finally, we will summarize our results.

### 1.2 Introduction to the stock market

A stock market is a market for the trading of company stock, and derivatives of same; both of these are securities listed on a stock exchange as well as those only traded privately. A stock is a portion of a company that can be bought or sold. Companies issue stocks to generate income. Stock prices change all the time. Mainly, they are determined by supply and demand. If the supply of a stock at a certain price is low and the demand is high, then the price will rise. If a company does well, people who own its stock will profit. If companies do poorly and people no longer think they will make money, the stock prices will drop. Since no one can be completely confident in a company, the stock prices fluctuate constantly.

It is easier to understand the stock market if we only use paper trading as an example. Paper trading is using imaginary funds to simulate the buying and selling of stocks. By doing this, we can pretend we are involved with the trading system and learn through experience.

### 1.3 Technical Terms

## NYSE

"Twenty-four prominent brokers and merchants gather on Wall Street to sign the Buttonwood Agreement, agreeing to trade securities on a commission basis." [13] The New York Stock Exchange traces its origin back to this pact and has grown from trading five securities to becoming the second largest stock exchange in the United States in terms of number of companies. Throughout the years, the exchange has gone through changes in its operations. In 1938, the exchange hired its first paid president and created a board of governors. Then in 1971 the exchange was incorporated as a not-for-profit corporation. It is not operated by the NYSE Group, which was formed by a merger with Archipelago Holdings, a fully electronic exchange, and changed it status to a for-profit corporation.

The NYSE uses a continuous auction format for trading. Each listed stock has a specific location on the trading floor. A specialist broker, who is employed by a NYSE member firm, acts as an auctioneer in an open outcry auction market environment. Exchange members that want to buy or sell a particular stock on behalf of an investor will gather around the post and shout out their order. However, over half of all the order is now electronically delivered to the floor.

## NASDAQ

Founded in 1971, NASDAQ (National Association of Securities Dealers Automated Quotations) is an American electronic stock exchange. NASDAQ allows multiple market players to use its electronic communications networks for trading. There are nearly 3,200 industry leading businesses listed in NASDAQ. On average, more trades are performed daily than any other market in the world. The market peaked during the dot-com craze in 2000 at 5132.52 and, since the crash, hasn't reached half of that value.

## 2. Long Term Fundamental Analysis

### 2.1 Theory of Long Term Fundamental Analysis

Fundamental investing is a combination of several focused approaches of stock trading. In other words, it combines several investing techniques and looks at many factors, but doesn't go in depth on them. It's not as complicated as it sounds though, fundamental investing is just how it sounds, finding a company that is fundamentally strong and capitalizing on it. The style that it resembles the most would be value investing, which focuses on buying under-valued stocks in order to make a long term gain when the market realizes its mistakes. However, unlike value investing, which mainly focuses on a company's $\mathrm{P} / \mathrm{E}$, fundamentalists also take into consideration a company's financial statements, balance sheets and when to buy. In order to find a good company that fits the fundamental style, more time is needed for this approach than for other trading techniques because it requires a lot more research. Here is a basic table of what the fundamental style is about (scale of 1-10, 10 being most)[15]:

| $\quad$ Characteristics | Rating |
| :--- | :---: |
| Discipline | 4 |
| Patience | 10 |
| Risk | 1 |
| Gains | 5 |
| Volatility | 2 |
| Time | 10 |
| Commitment of Time | 10 |
| Quantitative | 10 |
| Reading graphs | 1 |
| Confidence | 10 |

Table 2.1.1 Basic Table of Fundamental Style

As you can see, fundamentalists are subject to considerably less risk than other approaches, but the gains that come with the risk also take a slight fall. Focusing on companies that are undervalued means you are investing in a company that is financially sound (has little to no debt), and are just undervalued by the market because not many people have realized its worth. It's safe because their balance sheets and financial statements show that the company definitely has a future. Capitalizing on that however requires the market to realize its mistake, which can take a long time. Although fundamentalists do not emphasize graph reading, it is a major tool in order to calculate the right time to buy, and sell. Using three of the most popular graphs, the MACD, the moving average, and the Stochastic, we will see when a company's growth shows a turn for growth (buy) or a decline (sell).

### 2.2 Criteria for Choosing Companies

a) Buy the company, not the stock: This means, you want to own a company that has good structure, high efficiency, and produces a product or service that has a future. Companies that you don't understand or companies that have weak internal structure should be avoided. There are a few key points to focus on when choosing the right companies. These are historical company data, basic knowledge, competitiveness, management, and margin of safety good.
b) Historical data: A good habit is to look at several key values of a company's financial statements to understand how well a company improves and grows. In this case, we want to choose a company who's been around for around 10 years or more. This lowers the risk that they will disappear overnight.
c) The $\mathbf{5}$ key figures to look at, in order of importance, are:

- ROIC (Return on Investment Capital)
- Return on Equity
- EPS (Earning per Share)
- Sales
- Operating/free cash flow.

Debt should also be analyzed as well but the basic rule about debt is that it should be less than three times the yearly free cash flow average. The main 5 numbers
should be compared with their historical averages of 10 years, 5 years, 3 years, and 1 year. All of these should be above a $10 \%$ growth increase with a healthy rising trend in order for it to satisfy the basic structure of a good company to invest in. In order to save time, it can be noted that you search the data in the order mentioned, and if ROIC is below $10 \%$, the rest of the numbers do not really matter. The only flexible number is the operating/free cash. Just as long as there isn't anything noticeably wrong, it should be okay.
d) Basic knowledge: Being an expert in the field is not necessary, but you have to basically understand what a company does, in order for you to gain confidence in its survival in the future. Investing in companies you don't understand, whether because the data shows how great a company it is, or because you got a tip saying it's going to do very well, should not be your sole basis for investing in it.
e) Competitiveness: A company has the ability to surpass its competitors with a certain edge. Some examples are brand name, great advertising, monopoly, patents etc. An example would be Harley Davidson. About 10 years back, the Japanese motorcycle industry made a big US campaign on how efficient their motorcycles were. However, it could not beat out the image of Harley Davidson, and the significance it has in American tradition. You want to know that the company you are choosing has an edge over the other companies in the same industry; therefore it will survive and hold the growth rate that other companies can't.
f) Management: Make sure there isn't a drastically horrible person in charge. It's very hard to tell for common investors, but if you watch the 5 historical numbers, in relation to the market average for that specific field, read the CEO's letter to the shareholders and see if it coincides with exactly how the companies are actually doing. Some CEO's always write over inflated positive letters, even when the company had a terrible year. Even if their historical data is decent, it might not be the best idea to invest, because the CEO's actions do not suggest any plan of action to turn the company's problem points around.
g) Margin of safety: this is the most important aspect for fundamental investing. You always want to have a big margin of safety when you purchase the stock you
want. This means that you always buy a stock when it is undervalued by the market. In order to do so, you have to calculate just how fast your company can grow. In order to calculate future EPS growth rate, we look at historical equity (not historical EPS), the expert estimate for the next 5 years (can be found on most websites, such as msn, yahoo etc...), and take the lowest of the 2 . In order to calculate the PE, we also choose the lowest of two numbers, 2 times the EPS growth rate, or the reasonable average of its historical PE. Since the historical PE often has 1-2 year spikes, which offset the data, the mean is often an inaccurate account of its actual PE. Once you have both the growth rate and the PE, you can have a good estimate of a company's price in 5 years. To calculate what the buying price should be, you want to factor in around a 15\% yearly gain, to reach a current price. Then, divide the current price by 2 , to get a big margin of safety.

### 2.3 Companies Selected

For this section I chose companies and attained their financial data for the past 10 years. After attaining the data from the companies, I chose the companies that had high growth histories and a margin of safety of around $50 \%$. Since fundamental investing is a long term strategy, I also chose to diversify my portfolio by researching companies that are from separate industries (refer to the appendix for specific growth data of the companies).

Apollo (APOL): Apollo Group, Inc. (Apollo Group) is a provider of higher education to working adults. The Company operates through many subsidiaries such as: The University of Phoenix, Inc. (University of Phoenix), Western International University, Inc. (Western International University), Institute for Professional Development and The College for Financial Planning, Inc. (the College for Financial Planning). As of August 31, 2005, Apollo Group offered its programs and services at 90 campuses and 154 learning centers in 39 states, Puerto Rico, Alberta, and British Columbia. The Company's combined degree enrollment was approximately 307,400 at August 31, 2005.


Figure 2.3.1 One year data for Apollo

The Cheesecake Factory (Cake): The Cheesecake Factory Incorporated operates fullservice, casual dining restaurants in the United States. The Company operates its restaurants under The Cheesecake Factory and Grand Lux Cafe marks. As of February 21, 2006, it operated 103 full-service, casual dining restaurants under The Cheesecake Factory mark in 29 states and the District of Columbia. As of February 21, 2006, it also operated seven full-service, casual dining restaurants under the Grand Lux Cafe mark in Sunrise, Florida; Garden City, New York; Houston, Texas; Dallas, Texas; Chicago, Illinois; Los Angeles, California, and Las Vegas, Nevada, and one self-service, limited menu express foodservice operation under The Cheesecake Factory Express mark inside the DisneyQuest family entertainment center in Orlando, Florida. It also operates a bakery production facility in Calabasas Hills, California, which produces baked desserts and other products for its restaurants and for other foodservice operators and distributors.


Figure 2.3.2 One Year Data for Cake

Chicos (CHS): Chico's FAS, Inc. is a specialty retailer of private-label, casual-to-dressy clothing, intimates, complementary accessories and other non-clothing gift items. The Company offers these products under the Chico's, White House/Black Market (WH/BM), Soma by Chico's (Soma) and Fitigues brand names. The Chico's brand sells private-label clothing that is focused on women who are 35 years old and over. The WH/BM brand focuses on women who are 25 years old and up, and its offerings include fashion and merchandise in the classic colors of white and black, and related shades. The Soma brand is an intimate apparel concept, which offers intimate apparel, sleepwear and activewear. On January 30, 2006, the Company acquired most of the assets of Fitigues, Inc. (Fitigues), a fitness inspired brand that offers activewear clothing. As of March 17, 2006, the Company operated 784 retail stores in 47 states, the District of Columbia, the United States Virgin Islands and Puerto Rico.


Figure 2.3.3 One Year Data for Chicos

Ebay (EBAY): eBay Inc. (eBay) provides online marketplaces for the sale of goods and services, online payments services and online communication offerings to a diversommunity of individuals and businesses. eBay has three primary businesses: the eBay Marketplaces, Payments and Communications. eBay Marketplaces provide the infrastructure to enable online commerce in a variety of formats. Its Payments business, which consists of its PayPal business, enables individuals or businesses to send and receive payments online. eBay's Communications business, which consists of its Skype business, enables voice-over-Internet protocol (VoIP) calls between Skype users. In February 2005, the Company acquired Rent.com. During the year ended December 31, 2005, it acquired three international classifieds Websites. In August 2005, eBay acquired Shopping.com. In October 2005, it acquired Skype. In November 2005, eBay acquired VeriSign, Inc.'s payment gateway business. On April 24, 2006, it acquired Tradera.com.


Figure 2.3.4 One Year Data for Ebay
A.S.V. (ASVI): A.S.V., Inc. (ASV) designs, manufactures and sells track-driven allseason vehicles. The Company has three product lines, the Posi-Track product line, the undercarriage product line and the Loegering product line. The Posi-Track and undercarriage product lines use a rubber track suspension system that takes advantage of the benefits of both traditional rubber wheels and steel tracks. Posi-Track products are machines used in the construction, agricultural, landscaping, rental, military, and other markets. Undercarriages are sold to Caterpillar Inc. (Caterpillar) as a primary component on its Multi-Terrain Loader (MTL) product line. Loegering is a manufacturer of traction products for wheeled skid-steers and also provides attachments for the skid-steer market. ASV's subsidiaries include A.S.V. Distribution, Inc. and Loegering Mfg. Inc. In January 2005, ASV introduced a model built on RC-85/100 platform and in January 2006, it introduced SR-70 and SR-80 in its Posi-Track product line.


Figure 2.3.5 One Year Data for ASVI

Unit Corporation (UNT): Unit Corporation is engaged in the land contract drilling of natural gas and oil wells, the exploration, development, acquisition and production of oil and natural gas properties, and the gathering and processing of natural gas. The Company's contract drilling operations are focused primarily in the natural gas producing provinces of the Oklahoma and Texas areas of the Anadarko and Arkoma Basins, the Texas Gulf Coast, the North Texas Barnett Shale and the Rocky Mountain regions. Unit's primary exploration and production operations are also conducted in the Anadarko and Arkoma Basins and in the Texas Gulf Coast area with additional properties in the Permian Basin. The majority of its contract drilling and exploration and production activities are oriented toward drilling for and producing natural gas. At December 31, 2005, Unit had an interest in a total of 6,465 wells and served as operator of 1,208 of those wells.


Figure 2.3.6 One Year Data for Unit

Lowe (LOW): Lowe's Companies, Inc. operates as a home improvement retailer. The Company offers a line of products and services for home decorating, maintenance, repair, remodeling and property maintenance. Lowe's Companies, Inc.'s customers include retail do-it-yourself (DIY) customers, do-it-for-me (DIFM) customers, who utilize the Company's installation services, and commercial business customers. As of February 3, 2006, the Company operated 1,234 stores in 49 states, with 140 million square feet of retail selling space. A typical Lowe's home improvement store stocks approximately 40,000 items. Each store carries a selection of national brand name merchandise, such as Whirlpool, KitchenAid, Samsung, Pella, Werner, Kohler, DeWalt, John Deere, Troy-Bilt, Jenn-Air, ClosetMaid and others.


Figure 2.3.7 One Year Data for Lowe

### 2.4 Transactions

## Week 1:

Of the 7 companies I had picked over the previous weeks, I looked at their graphs briefly. Out of the MACD, Stochastic, and the moving average, I tried to find a graph that reasonably followed the price fluctuations but didn't look too much into it focusing more on the fact that the company data will prove itself.

Apollo (APOL): The only stock that I decided to sell this week; All three indicators showed it was doing bad so I decided to drop it while I still had a lead.

| Symbol | Date | Action | Price | Shares | Net Cost | close <br> price | net <br> profit | Accum Gain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| APOL | 25-Sep | buy | \$49.58 | 101 | (\$5,008) |  |  | \$0 |
|  | 29-Sep | sell | \$49.70 | 101 | \$5,020 | \$49.20 | \$12.12 | \$12.12 |
| UNT | 25-Sep | buy | \$45.02 | 530 | $(\$ 23,861)$ | \$45.97 |  | \$12.12 |
| CAKE | 26-Sep | buy | \$27.00 | 370 | (\$9,990) | \$27.19 |  | \$12.12 |
| EBAY | 26-Sep | buy | \$27.60 | 1087 | $(\$ 30,001)$ | \$28.36 |  | \$12.12 |
| LOW | 26-Sep | buy | \$28.61 | 210 | $(\$ 6,008)$ | \$28.06 |  | \$12.12 |
| ASVI | 27-Sep | buy | \$15.20 | 1315 | $(\$ 19,988)$ | \$14.91 |  | \$12.12 |
| CHS |  | none |  |  |  |  |  | \$12.12 |
| Startcash: |  |  |  |  |  |  |  |  |
| End <br> cash: | \$10,094 |  |  |  |  |  |  |  |
| est. gain | \$845.19 |  |  |  |  |  |  |  |
| trans fee | \$70 |  |  |  |  |  |  |  |

Table 2.4.1 Karl Week 1


Figure 2.4.1 Sell Signal for Apollo

## Week 2

| Symbol | Date | Action | Price | Shares | Net Cost | close <br> price | net profit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| cakeum |  |  |  |  |  |  |  |  |

Table 2.4.2 Karl Week 2

The Cheesecake Factory (CAKE): This stick made a small gain earlier in the week when the indicators told me to get out. Then bought back 2 days later for $\$ 0.20$ cheaper. Closed at a very nice price.

Apollo (APOL): I bought back Apollo on the $4^{\text {th }}$. I checked during lunch and the price had risen quite a bit so I took a note down to buy at that price. Since I had so much cash left over from selling ASVI, I decided to put more into Apollo. I got this chart at the end of the day and it had already skyrocketed. The closing price for the week was even better.


Figure 2.4.2 Sell Signal for Cake


Figure 2.4.3 Apollo Buyback
A.S.V. (ASVI): I think I had the most problem with this company. The indicators weren't working as well as I had hoped for because my settings made it not as sensitive to changes. I took a big hit when I sold early that day and lost a few hundred dollars. I bought it back when it recovered that week but I decided I would put less in due to uncertainty reasons. I also made a note to adjust the settings on my indicators with a minor loss.


Figure 2.4.4 ASVI Insensitive Signals

Unit Corporation (UNIT): I made a big mistake with this stock. I just realized it was steadily decreasing for the last month or two. Since the MACD and the moving average weren't even close to recovering, I decided to sell while I didn't lose too much money and I got really lucky that I didn't. It didn't recover for the rest of the week, and dropped even further so I'm glad I did.


Figure 2.4.5 Trend for Unit

## Weeks 3 \& 4

| Symbol | Date | Action | Price | Shares | Net Cost | close <br> price | net <br> profit | Accum <br> Gain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cake | 10-Oct | sell | $\$ 27.30$ | 400 | $\$ 10,920$ |  | $\$ 120$ | $(\$ 1,019.48)$ |
|  | 12-Oct | buy | $\$ 27.12$ | 600 | $(\$ 16,272)$ |  |  | $(\$ 1,019.48)$ |
|  | 19-Oct | sell | $\$ 26.80$ | 600 | $\$ 16,080$ |  | $(\$ 192)$ | $(\$ 1,211.48)$ |
| Apol | 12-Oct | sell | $\$ 51.13$ | 275 | $\$ 14,061$ |  | $\$ 36$ | $(\$ 1,175.73)$ |
| EBAY | 16-Oct | sell | $\$ 29.38$ | 1087 | $\$ 31,936$ |  | $\$ 1,935$ | $\$ 759.13$ |
|  | 19-Oct | buy | $\$ 29.31$ | 750 | $(\$ 21,983)$ | 30.49 |  | $\$ 759.13$ |
| LOW | 20-Oct | sell | $\$ 30.30$ | 210 | $\$ 6,363$ |  | $\$ 355$ | $\$ 1,114.03$ |
| CHS | 20-Oct | buy | $\$ 22.51$ | 1000 | $(\$ 22,510)$ | $\$ 22.86$ |  | $\$ 1,114.03$ |
| ASVI |  | hold |  | 1100 |  | $\$ 16.15$ |  | $\$ 1,114.03$ |
| Unit |  | none |  |  |  |  |  | $\$ 1,114.03$ |

Table 2.4.3 Karl week 3 \& 4

The Cheesecake Factory (CAKE): There were some fairly strong fluctuations in the prices for cheesecake factory that I thought were worth the gain at the time. However, due to misjudgments in the trend of the MACD vs. stochastic models, I came out with an expected minor loss.


Figure 2.4.6 Trend for Cake

Apollo (APOL): I waited a while too long to sell this week so my profits took an unnecessary hit as a result. Both the MACD and the stochastic indicated that I should have gotten out at the beginning of the week but I kept hoping it was just a small drop. Overall it was a good lesson to remind me to stick with my basics.

Ebay (EBAY): I think I followed my rules very well for Ebay because it's a dot com stock and I felt that even though it's fairly stable now, there is no point taking risks. I sold on the $16^{\text {th }}$ for a very nice gain when my indicators appeared to be dropping below 0 and bought back early in the morning on the $19^{\text {th }}$ for less than my selling price.


Figure 2.4.7 Trend for Apollo


Figure 2.4.8 Trend for Ebay

Lowe's (LOWE): I took a very nice educated guess that all 3 lines were going to drop the next day so I sold all my shares for a small profit while I still had it. This early action was caused by my wait with Apollo stock early this week, and as a result when Low dropped the next day, I was safely out of the way.


Figure 2.4.9 Trend for Low

## Week 5

By now I have come to understand a steady pattern that I am hoping to follow. The moving average is a small indicator to show how frequently to check in on a stock. if its close to the current price, I should pay more attention to it, and if the stock price is below the average, I will wait to buy it. The MACD and the stochastic generally hint at a drop in price or an increase. I will wait to see if it changes and make a decision by the end of the day if either is very close to crossing below the red line. When both start to pick up, and one is close to crossing above the red, I will buy in again. I also introduced the 15day moving average line. I believe that it is less sensitive than the other two therefore it provides a good boundary on stocks to look at.

| Symbol | Date | Action | Price | Shares | Net Cost | close <br> price | net <br> profit | Accum <br> Gain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| CHS | $27-$ Oct | sell | $\$ 23.98$ | 1000 | $\$ 23,980$ |  | $\$ 1,470$ | $\$ 2,584.03$ |
| EBAY |  | hold |  | 750 |  | $\$ 32.07$ |  | $\$ 2,584.03$ |
| ASVI | $27-$ Oct | sell | $\$ 16.30$ | 1100 | $\$ 17,930$ |  | $\$ 1,430$ | $\$ 4,014.03$ |
| apol |  | none |  |  |  |  |  | $\$ 4,014.03$ |
| low |  | none |  |  |  |  |  | $\$ 4,014.03$ |
| cake |  | none |  |  |  |  | $\$ 4,014.03$ |  |
| end cash $\$ 81,802$ |  |  |  |  |  |  |  |  |
| est. gain | $\$ 2,450$ |  |  |  |  |  |  |  |
| trans fee | $\$ 20$ |  |  |  |  |  |  |  |

Table 2.4.4 Karl Week 5

Chico's (CHS): I decided to sell my Chico's stocks this week, guessing that the slow stochastic position will fall below the red line soon, and since the MACD does not look too good either.


Figure 2.4.10 Trend for CHS
A.S.V. (ASVI): I sold this on the $27^{\text {th }}$ after the price had dropped on the $26^{\text {th }}$. at the end of the day it had dropped below the moving average so I got lucky I caught it in the morning


Figure 2.4.11 Trend for Asvi

Ebay (EBAY): I decided to keep my money in here because I'm hoping it'll recover and rise, as well as because this project requires us to view stock behavior and this stock is the only one left in my portfolio. I remain slightly optimistic because overall, eBay has steadily been climbing for the last few weeks. I will most likely make a decision to sell on Monday at the first sign of a drop because the stochastic line is dropping.


Figure 2.4.12 Trend for Ebay

## Week 6

| Symbol | Date | Action | Price | Shares | Net Cost | close <br> price |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| EBAY |  | hold |  | 750 |  | net |
| Unit | 3-Nov | buy | $\$ 46.98$ | 900 | $(\$ 42,282)$ | Accum <br> Gain |
| Cake |  | none |  | $\$ 32.39$ |  |  |
| Apol |  | none |  |  | $\$ 4,014.03$ |  |
| low |  |  |  |  | $\$ 4,014.03$ |  |
| none |  |  |  | $\$ 4,014.03$ |  |  |
| chs |  |  |  | $\$ 4,014.03$ |  |  |
| none |  |  |  | $\$ 4,014.03$ |  |  |
| asvi |  |  |  |  | $\$ 4,014.03$ |  |

Table 2.4.4 Karl Week 6

Unit Corporation (UNIT): This was the only stock I bought this week. Aside from EBay, the other 5 stocks I had picked are all declining. The prices are below the moving average of 15 days, MACD and slow stochastic are both in the negatives. Unit was the only stock I guessed might make a turnaround. However I was slightly surprised when EBay maintained its steady climb.


Figure 2.4.13 Trend for Unit

## Week 7

This week looked a lot better for my stocks. The only stock that's still declining is Apollo. I have put ASVI and Lowe's on observation because I think both will turn up soon.

| Symbol | Date | Action | Price | Shares | Net Cost | close <br> price | net <br> profit | Accum <br> Gain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| Unit | 9-Nov | sell | $\$ 50.20$ | 300 | $\$ 15,060$ |  | $\$ 966.00$ | $\$ 4,980.03$ |
|  |  | hold |  | 600 |  | $\$ 50.20$ |  | $\$ 4,980.03$ |
| EBAY |  | hold |  | 750 |  | $\$ 32.81$ |  | $\$ 4,980.03$ |
| CHS | 10-Nov | buy | $\$ 22.94$ | 500 | $(\$ 11,470)$ | $\$ 23.45$ |  | $\$ 4,980.03$ |
| cake | 10-Nov | buy | $\$ 26.82$ | 225 | $(\$ 6,035)$ | $\$ 26.84$ | $\$ 4,980.03$ |  |
| asvi |  | watch |  |  |  |  | $\$ 4,980.03$ |  |
| low |  | watch |  |  |  |  | $\$ 4,980.03$ |  |
| apol |  | none |  |  |  |  | $\$ 4,980.03$ |  |
| end cash $\$ 37,035$ |  |  |  |  |  |  |  |  |
| est. gain | $\$ 1,823$ |  |  |  |  |  |  |  |
| trans fee | $\$ 30$ |  |  |  |  |  |  |  |

Table 2.4.4 Karl Week 7

Unit Corporation (UNIT): Based on my view of the charts, I am not sure how long Unit will rise before taking another dip; therefore I sold $1 / 3$ of my shares while I had a nice profit. This was also due to having too much invested in 1 stock and I felt unsafe holding that much in a stock that had given me trouble before. In fact looking at my chart, the only thing that made me decide to sell was the declining line of the slow stochastic model, which I hadn't misread yet.

Ebay (EBAY): Ebay is still steadily climbing. It hasn't climbed so much within the last week but as long as its going up I'll keep my portfolio in there.


Figure 2.4.14 Trend for Unit


Figure 2.4.15 Trend for Ebay

Chico's (CHS): An educated guess is that Chico's will climb next week. The Moving average and Stochastic both climbed into the positive, and MACD looks like it will too. This was taken at the end of the day and it had already climbed about $\$ 0.50$.


Figure 2.4.16 Trend for CHS

The Cheesecake Factory (Cake): Cake appears to be climbing and is a total gamble at this point so I decided to invest less than $10 \%$ and see how it does.


Figure 2-4.17 Trend for Cake

## Week 8

This week showed very promising results. Most of the stocks have taken a rise in value and although I am pleased I made the right decision last week in buying cake and CHS last week, I am more confident now that I know I made the right decision in watching ASVI and Lowe's so that I could get them at the beginning of their rise.

|  |  |  |  |  |  | close |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| Symbol | Date | Action | Price | Shares | Net Cost | nccum <br> price | profit | Gain |

Table 2.4.4 Karl week 8

Unit Corporation (UNIT): As predicted from last week, I watched Unit to sell it this week because I thought it would start falling. This was seen on Thursday when the slow stochastic model fell negative and MACD took a negative slope.

Ebay (EBAY): I decided that Ebay was still doing very well and that I wouldn't sell unless the price dropped below the 15 day moving average.


Figure 2.4.18 Trend for Unit

Chico's (CHS): I'm putting CHS on watch. I think there is a $40 \%$ chance it'll fall next week due to the sudden leveling off of both the MACD and Stochastic.


Figure 2.4.19 Trend for CHS
A.S.V. (ASVI): ASVI took a big climb at the end of the week. I caught it near the beginning right when the Stochastic hit positive and MACD had a very high positive slope.


Figure 2.4.20 Trend for ASVI

Lowe's (LOWE): Like ASVI, this stock rose during the end of the week. I doubt it will continue climbing for very long but I'll be ready to sell right when it shows any sign of a fall.


Figure 2.4.21 Trend for Lowe

## Week 9

This has been a bad week. My purchases last week did not hold up as well as I had believed. However the election and everything going on right now might be bringing most of my stocks down as well. Since this is the last 2 weeks, I am starting to liquidate my purchases to reach a final cash amount.

| Symbol | Date | Action | Price | Shares | Net Cost | close <br> price | net <br> profit | Accum <br> Gain |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| CHS | 21-Nov | sell | $\$ 23.46$ | 500 | $\$ 11,730$ |  | $\$ 260.00$ | $\$ 7,412.03$ |
| low | 22-Nov | sell | $\$ 30.68$ | 1200 | $\$ 36,816$ |  | $\$ 900.00$ | $\$ 8,312.03$ |
| cake |  | hold |  | 225 |  | $\$ 28.85$ |  | $\$ 8,312.03$ |
| asvi | 15-Nov | hold | 1550 | $\$ 15.20$ |  | $\$ 8,312.03$ |  |  |
| EBAY |  | hold | 750 | $\$ 33.39$ |  | $\$ 8,312.03$ |  |  |
| Apol |  | hold | 100 |  | $\$ 36.27$ |  | $\$ 8,312.03$ |  |

end cash \$53,868
est. gain (\$413.25)
trans.
Fee $\$ 40$

Table 2.4.4 Karl week 9

Chico's (CHS), Lowe's (LOWE): Both CHS and Lowe's showed obvious sell signals and although I made a profit on both, CHS had already dropped quite a bit from last week's closing price. The negative estimated gain is due to the dropping of my other 4 stocks' closing prices from last week. However I am hopeful they will rebound next week and allow me to sell at a high value


Figure 2.4.22 Trend for Chs


Figure 2.4.23 Trend for Low

## Week 10

This is the last week of the simulation and I monitored the stocks that I still had for the best time to exit the market. Of the 4 stocks I still owned, only one was held for the entire week and sold at the closing price on Friday. The other three dropped early in the week and I got out as soon as the MACD and stochastic lines took a negative slope. I ended up getting fairly accurately most of the high prices for the week.

| Symbol | Date | Action | Price | Shares | Net <br> Cost | Close <br> price | net profit | Gain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :--- |
| cake | 28-Nov | sell | $\$ 28.53$ | 225 | $\$ 6,419$ |  | $\$ 384.75$ | $\$ 8,696.78$ |
| asvi | 27-Nov | sell | $\$ 15.12$ | 1550 | $\$ 23,436$ |  | $\$ 899.00$ | $\$ 9,595.78$ |
| EBAY | 27-Nov | sell | $\$ 33.21$ | 750 | $\$ 24,908$ |  | $\$ 2,925.0$ | $\$ 12,520.78$ |
| Apol | 1-Dec | sell | $\$ 39.20$ | 100 | $\$ 3,920$ |  | $\$ 12,520.78$ |  |
| CHS |  | none |  |  |  |  | $\$ 12,520.78$ |  |
| low |  | none |  |  |  |  | $\$ 12,520.78$ |  |
| end cash $\$ 112,511$ |  |  |  |  |  |  |  |  |
| est gain | $(\$ 78.00)$ |  |  |  |  |  |  |  |
| trans fee | $\$ 40$ |  |  |  |  |  |  |  |

Table 2.4.4 Karl week 10

Ebay (EBAY): I got very lucky with Ebay, deciding on getting out as soon as any of my indicators went negative. If I hadn't decided to, I would have waited to see if it would recover, which would have been a very bad decision.


Figure 2.4.24 Trend for Asvi


Figure 2.4.26 Trend for Cake


Figure 2.4.27 Trend for Apol


Figure 2.4.25 Trend for Ebay

### 2.5 Analysis

The results of my experiment for the past 10 weeks were very favorable. In the end I made a total of $12.51 \%$ in 10 weeks of investing, and learned a lot both from my research and from making mistakes. During my trial, I realized my method of fundamental analysis held both flaws and benefits. I also realized that my very high rate of gain was due to not only my own luck and success, but also due to an overall rise in the market.

While reviewing my weekly results, I quickly noticed that although learning from my mistakes early on enabled me to attain a greater profit margin, the bulk of my profits were not solely from clever trading, but due to picking companies that grew because their inherent values were high. The most dramatic company was eBay, because very little trading work was required on my part. I believe that although only 1 in the 7 companies I researched showed such remarkable growth, the benefit makes the fundamental method very worthwhile.

Although the fundamental method does not require an expertise in reading graphs, I find that it is much more important than I had first believed. During the first few weeks, my carelessness allowed me to make several graph reading mistakes that were corrected later on by learning from my own mistakes. These were due to inexperience with the indicators while working with the fundamental method.

I believe the main conclusion I reached was that my $12.51 \%$ gain rate was due to an overall growth in the market. During the first few weeks, I noticed that there was substantial growth in not only the stocks I had chosen, but their respective categories as well. I noticed this because during the last 2 to 3 weeks, I had negative growths that I could not overcome. This was due to the election and accounted for the only overall weekly losses I had sustained up to that point. This is a very important aspect of Fundamental Analysis that I had forgotten about. The fact that this method is heavily based on buying under-priced companies was my main focus. After 2 straight weeks of loss, I finally understood the weakness of this method, is that in order to fully experience the benefits and weaknesses, the length of time that I spend investing would have to be
greater. The value of the under-priced stocks will only go up when a majority of investors realize that it is undervalued and begin to pay attention to it, and that could take much longer than the span of our project.

## 3. Short Term Technical Analysis

This section provides a brief introduction to the theory short term technical analysis, and also the criteria used when selecting companies to invest in. Those criteria are then applied and companies are selected for the actual stock market simulation.

### 3.1 Theory of Short Term Technical Analysis

Technical analysis sprouted from the theory proposed at the turn of the 20th century by Charles H. Dow. Dow saw the market as being comprised of two cyclical wave components: one primary wave spanning 28-33 months, and short-term fluctuations stemming off the primary wave. Dow's disciples began using charts and moving averages as technical trading indicators; the original aim of technical analysis was to guard investors against loss.

Technicians differ from fundamentalists in that they aim to limit the duration window in which they trade. A fundamentalist will purchase a stock that is undervalued and sell when the price appreciates to more accurately reflect the perceived value of the business; the fundamentalist takes a more conservative approach to trading and waits for his investments to ripen before selling. The technician is apt to maximize profits at all times in a trading session; he will hold on to a stock as long as the growth is foreseeable, but is also willing to sell at a moment's notice and incur a small loss. As a technician, it is vital to view the market fluctuations as recurring and predictable.

There are a multitude of mathematical factors used by technicians to help predict stock activity. Regardless of the factors selected in an analytic period, some will be omitted; it is our objective to select the measures which will assure us efficient trading strategies that provide us with maximum return on invested capital. It is stated by investors that the average return on stocks in the market hovers around $10 \%$, but with the implementation of effective technical analysis, return on investment can reach or surpass $15 \%$. In the next section, we will present our criteria for stock selection and growth management.

### 3.2 Criteria for Choosing Companies

a) Trend lines: These predict the overall movement of a stock price. The rule behind trend lines is that prices tend to move towards the trend line. Trends can be long, intermediate, or short. A popular method is to use long-term trends to determine the overall trend, and then use short-term trends to determine the timing of stock purchases and sales. Even though we are trading on a short-term basis, trading in the direction of the long term trend will maximize our profits. An example of using this method is to look for companies on an upward, or bullish, long trend. If the price of the stock for that company happens to dip on a certain day, it is most likely that in the near future that price will move back towards the trend line. Also, if a price is above the trend line, it will most likely fall back down. Using these trends we can time our buying and selling of stocks to make a profit on every trade.
b) Moving Averages: Plotting two moving averages, such as 4- and 9-day averages, allows us to determine if a trend is likely to continue. The crossings between the lines are used to determine trades.
c) MACD: Moving Average Convergence Divergence. The MCAD is easy to read. When the faster line crosses above the slower line, and both lines are below zero, a stock should be purchased. When the faster line crosses below the slower line, and both lines are above zero, a sale should be made.

### 3.3 Companies Selected

For our ten-week analysis we chose two companies from four of the major sectors.

Cisco Systems, Inc. (CSCO) is an American manufacturer of telecommunications equipment based in California. The company originally manufactured only enterprise routing equipment, but it now sells a variety of devices for both enterprises and telecommunications carriers [1].


Figure 3.3.1 Cisco stock prices over the past three months.

Center Bancorp (CNBC) through its wholly owned subsidiary, Union Center National Bank, Union, New Jersey operates twelve-banking locations. Banking centers are located in Union Township (6 offices), and one each in Berkeley Heights, Madison, Willburn/Vauxhall, Morristown (3 offices), Springfield, and Summit, New Jersey. The Bank also operates at remote ATM locations in Union Hospital in Union, and at the Union NJ Transit Train Station. Union Center National Bank is the largest commercial Bank headquartered in Union County, chartered in 1923, and is a full service banking company [2].

Toyota Motor Corporation (TM) is a Japanese multinational corporation that manufactures automobiles, trucks, buses, and robots headquartered in Toyota, Aichi, Japan. Toyota is the world's second largest by overtaking Ford in overall vehicle sales and the largest Asian manufacturer and is speculated by many analysts that it is poised to become the largest automaker in the world by overtaking the American corporation General Motors in 2006 [3].


Figure 3.3.2 Center Bancorp stock prices over the past three months.


Figure 3.3.3 Past three months of TM stock prices

Delta Petroleum Corporation (DPTR) is a Denver, Colorado based independent energy company engaged in the exploration for, and the acquisition, development, and production of natural gas and crude oil. The core areas of operation include the Gulf Coast and Rocky Mountain regions. DPC has significant leaseholds in the Columbia River Basin in eastern Washington, which is a prospective frontier resource province [4].


Figure 3.3.4 Past three months of DPTR stock prices

Credicorp Ltd. (BAP) is engaged principally in commercial banking (including trade finance, corporate finance and leasing services), insurance (including commercial property, transportation and marine hull, automobile, life, health and pension fund underwriting insurance) and investment banking (including brokerage services, asset management, trust, custody and securitization services, trading and investment) [5].


Figure 3.3.5 Past three months of BAP stock prices

Sun Microsystems, Inc. (SUNW) is a vendor of computers, computer components, computer software, and information-technology services, founded in 1982. Sun's manufacturing facilities are located in Hillsboro, Oregon and Linlithgow, Scotland.

Sun's products include computer servers and workstations based on its own SPARC and AMD's Opteron processors, the Solaris Operating System, the NFS and ZFS network file systems, the Java platform, and a suite of software products including developer tools, Web infrastructure, and identity management applications [6].


Figure 3.3.6 Past three months of SUN stock prices

ACERGY (ACGY) Is a seabed-to-surface engineering and construction contractor for the offshore oil and gas industry. They plan, design and deliver complex, integrated projects in harsh and challenging environments. They operate internationally as one group - globally aware and locally sensitive, sharing their expertise and experience to create innovative solutions [7].

Black \& Decker (BDK) is a corporation based in Towson, Maryland best known for power tools and home appliances. It was founded in 1910 by S. Duncan Black and Alonzo G. Decker as a small machine shop in Baltimore, Maryland. In 1917, Black \& Decker invented the familiar portable electric drill, obtaining a patent for a hand-held
drill combining a pistol grip and trigger switch. Brands owned by Black \& Decker include DeWalt Power Tools, Porter Cable, Delta Machinery, Kwikset, Baldwin, Weiser Lock, Price Pfister, Ermhart Teknologies [8].


Figure 3.3.7 Past three months of ACGY stock prices


Figure 3.3.8 Past three months of BDK stock prices

### 3.4 Jorge's Transactions

## Week 1

|  |  |  |  |  | Net | Profit/ | Total | Accum. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Symbol | Action | Price | Shares | Cost/Proceeds | Loss | Cash | Gain |
| 9125 | ACGY | Buy | $\$ 14.95$ | 200 | $(\$ 2,990.00)$ |  | $\$ 47,010$ | $\$ 0$ |
|  | BAP | Buy | $\$ 40.80$ | 300 | $(\$ 12,240.00)$ |  | $\$ 34,770$ | $\$ 0$ |
|  | CSCO | Buy | $\$ 22.89$ | 200 | $(\$ 4,578.00)$ |  | $\$ 30,192$ | $\$ 0$ |
|  |  |  |  |  |  |  |  |  |
| 9126 | BDK | Buy | $\$ 79.50$ | 150 | $(\$ 11,925.00)$ |  | $\$ 18,267$ | $\$ 0$ |
|  | BDK | Sell | $\$ 79.11$ | -150 | $\$ 11,866.50$ | $(\$ 59)$ | $\$ 30,075$ | $(\$ 59)$ |
|  | CNBC | Buy | $\$ 15.90$ | 200 | $(\$ 3,180.00)$ |  | $\$ 26,895$ | $(\$ 59)$ |
|  | CNBC | Sell | $\$ 15.85$ | -200 | $\$ 3,170.00$ | $(\$ 10)$ | $\$ 30,055$ | $(\$ 69)$ |
|  | CSCO | Sell | $\$ 23.23$ | -200 | $\$ 4,646.00$ | $\$ 68$ | $\$ 34,769$ | $(\$ 1)$ |
|  |  |  |  |  |  |  |  |  |
| 9127 | ACGY | Sell | $\$ 16.46$ | -200 | $\$ 3,292.00$ | $\$ 302$ | $\$ 38,363$ | $\$ 301$ |
|  | BAP | Sell | $\$ 41.65$ | -300 | $\$ 12,495.00$ | $\$ 255$ | $\$ 50,857$ | $\$ 556$ |
|  | TM | Buy | $\$ 108.71$ | 100 | $(\$ 10,871.00)$ |  | $\$ 39,986$ | $\$ 556$ |
|  |  |  |  |  |  |  |  |  |
| 9128 | CSCO | Buy | $\$ 23.30$ | 200 | $(\$ 4,660.00)$ |  | $\$ 35,326$ | $\$ 556$ |
|  | DPTR | Buy | $\$ 21.00$ | 200 | $(\$ 4,200.00)$ |  | $\$ 31,126$ | $\$ 556$ |
|  | TM | Sell | $\$ 108.68$ | -100 | $\$ 10,868.00$ | $\$ 3$ | $\$ 41,997$ | $\$ 559$ |
|  |  |  |  |  |  |  |  |  |
| 9129 | CSCO | Sell | $\$ 23.43$ | -200 | $\$ 4,686.00$ | $\$ 20$ | $\$ 46,723$ | $\$ 579$ |
|  | DPTR | Sell | $\$ 21.15$ | -200 | $\$ 4,230.00$ | $\$ 30$ | $\$ 50,953$ | $\$ 609$ |

Table 3.4.1 Week 1 - Jorge

Acergy (ACGY): Early in the day on Monday, Acergy's MACD showed a buy signal, so I bought 200 shares at $\$ 14.95$ each. I missed two sell signals later that day, and on Tuesday. On Wednesday, however, I caught a very strong sell signal early in the day and sold all 200 shares back at $\$ 16.46$, making a profit of $\$ 302$. I did not make any more purchases later in the week from this company.


Figure 3.4.1 Acergy Week 1

Credicorp Ltd. (BAP): I missed a strong buy signal from this company on Monday, but managed to catch a very strong one on Tuesday, buying 300 shares for $\$ 40.80$ each. I missed two sell signals until Thursday, when I sold all 300 shares back at $\$ 41.65$ each. On this company I made [price] that week. Another buy signal appeared early on Friday, but it was not very strong, so I decided not to buy any shares.

Black \& Decker (BDK): Black \& Decker showed a strong buy signal on Tuesday morning, so I purchased 150 shares at $\$ 79.50$ each. Unfortunately, the price did not rise for long, and I missed an important sell signal. I was forced to sell my shares later that day to minimize my loss, and sold all 150 shares at $\$ 79.11$ each. This loss cost me a total of \$59.


Figure 3.4.2 Credicorp Ltd Week 1


Figure 3.4.3 Black \& Decker Week 1

Center Bancorp (CBNC): Center Bancorp did nothing but decline until Tuesday morning, when a buy signal lead me to purchase 200 shares at $\$ 15.90$ each. I missed a sell signal and was forced to sell my shares at $\$ 15.85$, losing a total of only $\$ 10$. I did not catch any other buy signals from the company during the week.


Figure 3.4.4 Center Bancorp Week 1

Cisco Systems Inc. (CSCO): I did not purchase shares on Cisco's first buy signal on Monday because it was weak. The second signal that day was stronger so I decided to purchase 200 shares of the stock at $\$ 22.89$ each. The stock price kept rising all day, so I kept the shares until Tuesday morning, when I saw a sell signal. I sold all 200 shares back at $\$ 23.23$ each. This earned me a profit of $\$ 68.00$. Later that week I saw another buy signal. On Thursday I purchased 200 shares from Cisco at $\$ 23.30$ each. On Friday, after seeing the price had begun to drop, I sold all of the shares at $\$ 23.43$ each. This earned me a small profit of $\$ 20.00$.


Figure 3.4.5 Cisco Systems Inc Week 1

Delta Petroleum Corp (DPTR): I did not catch any signals until the end of the week, when I purchased 200 shares at $\$ 21.00$ each. The price rose for a short while, but then began to drop. Because of this I sold all of my shares at $\$ 21.15$ each. This earned me a small profit of $\$ 30.00$.

Toyota Motors (TM): After noticing a pattern Monday and Tuesday, I decided to buy some shares from Toyota after a buy signal Wednesday. I purchased 100 shares at $\$ 108.71$. The price continued to rise, and on Thursday morning, I was surprised to see a sudden increase. However, I also saw a sell signal so I sold all 100 shares at $\$ 108.68$. I was late in reacting to the sell signal, but I only lost $\$ 3$. I missed the next buy signal, but that would have only lead to a $\$ 50$ profit.

Overall I made a total of $\$ 609$ profit this week. Assuming a trade cost of $\$ 10$ per transaction, my total brokerage cost would be $\$ 160$.


Figure 3.4.6 Delta Petroleum Week 1


Figure 3.4.8 Toyota Motors Week 1

## Week 2

| Date | Symbol | Action | Price | Shares | Net Cost/ <br> Proceeds | Profit/Loss | Total <br> Cash | Accum <br> Gain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| 1012 | BAP | Buy | \$41.86 | 100 | (\$4,186.00) |  | \$46,767 | \$609 |
|  | BAP | Sell | \$41.71 | -100 | \$4,171.00 | (\$15) | \$50,938 | \$594 |
|  | BDK | Buy | \$79.50 | 100 | (\$7,950.00) |  | \$42,988 | \$594 |
|  | BDK | Sell | \$79.99 | -100 | \$7,999.00 | \$49 | \$50,987 | \$643 |
| 1013 | CSCO | Buy | \$23.15 | 300 | (\$6,945.00) |  | \$44,042 | \$643 |
|  | CSCO | Sell | \$23.39 | -300 | \$7,017.00 | \$72 | \$51,059 | \$715 |
| $10 \backslash 4$ | BAP | Buy | \$41.52 | 200 | (\$8,304.00) |  | \$42,755 | \$715 |
|  | BAP | Sell | \$41.76 | -200 | \$8,352.00 | \$48 | \$51,107 | \$763 |
|  | DPTR | Buy | \$21.29 | 200 | (\$4,258.00) |  | \$46,849 | \$763 |
|  | DPTR | Sell | \$22.51 | -200 | \$4,502.00 | \$244 | \$51,351 | \$1,007 |
| $10 \backslash 5$ | BAP | Buy | \$42.45 | 200 | (\$8,490.00) |  | \$42,861 | \$1,007 |
|  | CSCO | Buy | \$23.94 | 200 | (\$4,788.00) |  | \$38,073 | \$1,007 |
|  | CSCO | Sell | \$23.88 | -200 | \$4,776.00 | \$12 | \$42,849 | \$1,019 |
|  | DPTR | Buy | \$23.17 | 200 | (\$4,634.00) |  | \$38,215 | \$1,019 |
| 1016 | BAP | Sell | \$42.75 | -200 | \$8,550.00 | \$60 | \$46,765 | \$1,079 |
|  | DPTR | Sell | \$23.03 | -200 | \$4,606.00 | (\$28) | \$51,371 | \$1,051 |

Table 3.4.2 Week 2 - Jorge

Credicorp Ltd. (BAP): Early Monday morning a weak buy signal from BAP lead me to purchase 100 shares at $\$ 41.76$ each. The trend did not last long, and I was forced to cut my losses and sell all 100 shares back at $\$ 41.7$ each, causing me to lose $\$ 15$ right away. On Wednesday, however, I was able to catch a buy signal which turned out to be beneficial. I bought 200 shares at $\$ 41.52$ each, and sold them later that day at $\$ 41.76$ each, earning me a profit of $\$ 48$. On Thursday, I purchased 200 shares from the company at $\$ 42.45$ each. I did not sell those shares until Friday for $\$ 42.75$ each, earning me $\$ 60$ on the trade.


Figure 3.4.9 Credicorp Ltd. Week 2

Black \& Decker (BDK): On Monday, Black \& Decker showed a buy signal, so I purchased 100 shares at $\$ 79.50$ each. That decision turned out to be a profitable one because I sold all 100 shares later at $\$ 79.99$ each, earning $\$ 49$ on the trade. There were other strong signals from the company later that week, but I was unable to catch any before the price began to decline.

Cisco Systems Inc. (CSCO): The first buy signal I caught from Cisco was on Tuesday. Because it was a strong signal, I purchased 300 shares at $\$ 23.15$ each. I held on to the shares until the next sell signal, when I sold all 300 at $\$ 23.39$ each, earning me a profit of $\$ 72$. I bought 200 more shares on Thursday at $\$ 23.94$ each. I was forced to sell them at $\$ 23.87$ when I began to lose money. I lost a total of $\$ 12$ on the trade.


Figure 3.4.10 Black \& Decker Week 2


Figure 3.4.11 Cisco Systems Inc Week 2

Delta Petroleum Corp (DPTR): I got very lucky on Wednesday when I purchased 200 shares at $\$ 21.29$ each. I was able to sell them later that day at $\$ 22.51$ each, earning me a profit of 244 ! I thought I could make another large profit on Thursday when I saw a strong buy signal, so I purchased 200 more shares at $\$ 23.17$ each. This signal didn't turn out like the other, and I was forced to sell the shares at $\$ 23.03$ each, causing me to lose \$28.

Overall I made a total of $\$ 442$ profit this week. This is about $\$ 160$ lower than last week.. For a beginner, though, this amount seems reasonable. Especially considering that I only invested a few hours each weekday. Assuming a trade cost of $\$ 10$ per transaction, my total brokerage cost would be $\$ 160$.


Figure 3.4.12 Delta Petroleum Week 2

Week 3

| Date | Symbol | Action | Price | Shares | Net <br> Cost/Proceeds | Profit/ <br> Loss | Total Cash | Accum <br> Gain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| 1019 | BAP | Buy | \$42.40 | 200 | $(\$ 8,480.00)$ |  | \$42,891 | \$1,051 |
|  | BAP | Sell | \$42.86 | -200 | \$8,572.00 | \$92 | \$51,463 | \$1,143 |
|  | BDK | Buy | \$81.22 | 300 | (\$24,366.00) |  | \$27,079 | \$1,143 |
|  | BDK | Sell | \$81.86 | -300 | \$24,558.00 | \$192 | \$51,655 | \$1,335 |
|  | CSCO | Buy | \$24.27 | 200 | (\$4,854.00) |  | \$46,801 | \$1,335 |
|  | CSCO | Sell | \$24.30 | -200 | \$4,860.00 | \$6 | \$51,611 | \$1,341 |
| $10 \backslash 10$ | BAP | Buy | \$42.89 | 200 | (\$8,578.00) |  | \$43,083 | \$1,341 |
|  | BAP | Sell | \$42.80 | -200 | \$8,560.00 | (\$18) | \$51,643 | \$1,323 |
|  | CSCO | Buy | \$24.17 | 200 | (\$4,834.00) |  | \$46,809 | \$1,323 |
|  | CSCO | Sell | \$24.37 | -200 | \$4,874.00 | \$40 | \$51,683 | \$1,363 |
| $10 \backslash 11$ | ACGY | Buy | \$17.29 | 200 | (\$3,458.00) |  | \$48,225 | \$1,363 |
|  | ACGY | Sell | \$16.90 | -200 | \$3,380.00 | (\$78) | \$51,605 | \$1,285 |
|  | SUNW | Buy | \$4.98 | 400 | (\$1,992.00) |  | \$49,613 | \$1,285 |
|  | SUNW | Sell | \$5.00 | -400 | \$2,000.00 | \$8 | \$51,613 | \$1,293 |
| $10 \backslash 12$ | BDK | Buy | \$83.47 | 200 | (\$16,694.00) |  | \$34,919 | \$1,293 |
|  | BDK | Sell | \$84.70 | -200 | \$16,940.00 | \$246 | \$51,859 | \$1,439 |
|  | CSCO | Buy | \$24.20 | 200 | (\$4,840.00) |  | \$47,019 | \$1,439 |
| $10 \backslash 13$ | BAP | Buy | \$43.28 | 200 | (\$8,656.00) |  | \$38,363 | \$1,439 |
|  | BAP | Sell | \$43.55 | -200 | \$8,710.00 | \$54 | \$47,073 | \$1,493 |
|  | CSCO | Sell | \$24.42 | -200 | \$4,884.00 | \$44 | \$51,957 | \$1,537 |
|  | SUNW | Buy | \$5.16 | 400 | (\$2,064.00) |  | \$49,893 | \$1,537 |
|  | SUNW | Sell | \$5.22 | -400 | \$2,088.00 | \$24 | \$51,981 | \$1,557 |

Table 3.4.3 Jorge Week 3

Acergy (ACGY): This week I only made one trade in ACGY. I was only able to catch a buy signal on Wednesday, purchasing 200 shares at $\$ 17.29$ each. Later that day I sold all 200 shares for $\$ 16.90$ each. My total loss was $\$ 78$ from this trade.


Figure 3.4.13 ACGY week 3

Credicorp Ltd. (BAP): On Monday, I made a profit of $\$ 92$ when I bought 200 shares at $\$ 42.40$ each and then sold them at $\$ 42.86$ each. My next trade was on Tuesday, when I purchased 200 shares at $\$ 42.89$ and then later sold them back at 42.80 each, causing me to lose $\$ 18$. My final trade with BAP was on Friday, when I purchased 200 shares at $\$ 43.28$ and then later sold them at $\$ 43.55$. I earned $\$ 54$ on this trade, and was my final trade for the week with BAP.

Black \& Decker (BDK): I made two trades with BDK this week. The first was on Monday, when I caught a strong buy signal from the MACD and purchased 300 shares at $\$ 81.22$ each. I sold those shares later that day at $\$ 81.86$ each and earned a total of $\$ 192$. My second trade was on Thursday, when another buy signal from the MACD caused me to purchase 200 shares at $\$ 83.57$ each. I sold the shares later that day at $\$ 84.70$, earning me a profit of $\$ 246$. Although I only made two trades, I made more profit from this company than any other this week.


Figure 3.4.14 BAP week 3


Figure 3.4.15 BDK week 3

Cisco Systems Inc. (CSCO): I profited from all three trades with CSCO this week. The first, on Monday, earned me a total of only $\$ 6$. On Tuesday, I purchased 200 shares at $\$ 24.17$ and then later sold them at $\$ 24.37$ each, earning me a profit of $\$ 40$. My final trade, on Friday, earned me a profit of $\$ 44$. I purchased 200 shares at $\$ 24.20$ on Thursday, and sold them on Friday at $\$ 24.42$ each.


Figure 3.4.16 CSCO week 3

Sun Microsystems (SUNW): Since SUNW shares are so cheap, I purchased double of what I normally purchase for each transaction. On Wednesday, I purchased 400 shares at $\$ 4.98$, and later sold them at $\$ 5.00$ each. This only earned me $\$ 8$. On Friday, I purchased 400 shares at $\$ 5.16$ each, and later sold them at $\$ 5.22$ each. This earned me \$24.


Figure 3.4.17 SUNW week 3

## Week 4

|  | Symbol | Action | Price | Shares | Net Cost/ | Profit/ | Total | Accum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 \backslash 16$ | BDK | Buy | \$85.48 | 200 | (\$17,096.00) |  | \$34,885 | \$1,557 |
|  | BDK | Sell | \$86.36 | -200 | \$17,272.00 | \$176 | \$52,157 | \$1,733 |
|  | DPTR | Buy | \$24.67 | 200 | (\$4,934.00) |  | \$47,223 | \$1,733 |
|  | DPTR | Sell | \$25.27 | -200 | \$5,054.00 | \$66 | \$52,277 | \$1,799 |
|  | SUNW | Buy | \$5.19 | 300 | (\$1,557.00) |  | \$50,720 | \$1,799 |
|  | SUNW | Sell | \$5.25 | -300 | \$1,575.00 | \$8 | \$52,295 | \$1,807 |
| $10 \backslash 17$ | ACGY | Buy | \$17.12 | 200 | $(\$ 3,424.00)$ |  | \$48,871 | \$1,807 |
|  | ACGY | Sell | \$17.18 | -200 | \$3,436.00 | \$12 | \$52,307 | \$1,819 |
|  | BAP | Buy | \$42.89 | 200 | (\$8,578.00) |  | \$43,729 | \$1,819 |
|  | BAP | Sell | \$43.50 | -200 | \$8,700.00 | \$122 | \$52,429 | \$1,941 |
|  | SUNW | Buy | \$5.12 | 300 | (\$1,536.00) |  | \$50,893 | \$1,941 |
|  | SUNW | Sell | \$5.09 | -300 | \$1,527.00 | (\$9) | \$52,150 | \$1,932 |
|  | TM | Buy | \$113.67 | 200 | (\$22,734.00) |  | \$29,416 | \$1,932 |
|  | TM | Sell | \$113.55 | -200 | \$22,710.00 | (\$24) | \$52,126 | \$1,908 |
| $10 \backslash 18$ | ACGY | Buy | \$17.15 | 200 | (\$3,430.00) |  | \$48,696 | \$1,908 |
|  | ACGY | Sell | \$17.21 | -200 | \$3,442.00 | \$12 | \$52,138 | \$1,920 |
|  | DPTR | Buy | \$25.37 | 200 | (\$5,074.00) |  | \$47,064 | \$1,920 |
|  | DPTR | Sell | \$25.33 | -200 | \$5,066.00 | (\$8) | \$52,130 | \$1,928 |
| 10\19 | BDK | Buy | \$85.36 | 200 | (\$17,072.00) |  | \$35,058 | \$1,928 |
|  | BDK | Sell | \$85.81 | -200 | \$17,162.00 | \$90 | \$52,220 | \$2,018 |
|  | DPTR | Buy | \$25.66 | 200 | (\$5,132.00) |  | \$47,088 | \$2,018 |
|  | DPTR | Sell | \$25.78 | -200 | \$5,156.00 | \$16 | \$52,244 | \$2,034 |
|  | TM | Buy | \$114.45 | 200 | (\$22,890.00) |  | \$29,354 | \$2,034 |
|  | TM | Sell | \$114.71 | -200 | \$22,942.00 | \$52 | \$52,296 | \$2,086 |
| 10120 | BAP | Buy | \$43.41 | 200 | (\$8,682.00) |  | \$43,614 | \$2,086 |
|  | BAP | Sell | \$43.57 | -200 | \$8,714.00 | \$32 | \$52,328 | \$2,108 |

Table 3.4.4 Jorge Week 4

Acergy (ACGY): I made two small profits this week with ACGY. On Tuesday I bought 200 shares at $\$ 17.12$ each and then sold them later that day at $\$ 17.18$ each, earning me
$\$ 12$. On Wednesday I purchased 200 more shares at $\$ 17.15$ and sold them at $\$ 17.21$ each. This earned me a profit of $\$ 12$.


Figure 3.4.17 ACGY week 4

Credicorp Ltd. (BAP): The first buy signal I caught from BAP was on Tuesday, when I purchased 200 shares at $\$ 42.89$ each. I sold the shares later, on the sell signal, at $\$ 43.50$ each. This trade earned me a profit of $\$ 122$. The next trade was on Friday, when I purchased 200 shares at $\$ 43.41$, and then later sold them at $\$ 43.57$ each. This trade earned me a profit of $\$ 32$.

Black \& Decker (BDK): I profited twice from BDK this week. The first was on Monday, when I purchased 200 shares at $\$ 85.48$, and then later sold them at $\$ 86.36$ each. This transaction earned me a profit of $\$ 176$. The second was on Thursday, when I purchased 200 shares at $\$ 85.36$, and sold them later that day at $\$ 85.81$ each. The last trade earned me a profit of $\$ 90$.


Figure 3.4.18 BAP week 4


Figure 3.4.19 BDK week 4

Delta Petroleum (DPTR): I traded three times this week with DPTR, and only one resulted in a financial loss. On Monday I purchased 200 shares at $\$ 24.67$ each, and sold them later at $\$ 25.27$ each for a profit of $\$ 66$. On Wednesday I purchased 200 shares at $\$ 25.37$ each, and later sold them at $\$ 25.33$ each, causing me to lose $\$ 8$. Finally, on Thursday, I purchased 200 shares at $\$ 25.66$ each and sold them later at $\$ 25.78$ each, earning me a profit of $\$ 16$.


Figure 3.4.20 DPTR week 4

Sun Microsystems (SUNW): On Monday I purchased 300 shares from SUNW at $\$ 5.19$ each. I sold them later that day at $\$ 5.25$ each for a profit of $\$ 8$. The second trade I made with SUNW was on Tuesday, when I purchased 300 shares at $\$ 5.12$. I sold all 300 shares later that day at $\$ 5.09$. Because of this, I lost $\$ 9$ on this trade.

Toyota Motors (TM): This week, I purchased 200 shares at $\$ 113.67$. I sold the shares later at $\$ 113.55$ and lost a total of $\$ 24$ on this trade.


Figure 3.4.21 SUNW week 4


Figure 3.4.22 TM week 4

## Week 5

| Date | Symbol | Action | Price | Shares | Net | Profit/ | Total | Accum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $10 \backslash 23$ | ACGY | Buy | \$17.42 | 200 | (\$3,484.00) |  | \$48,754 | \$2,108 |
|  | BAP | Buy | \$41.86 | 100 | (\$4,186.00) |  | \$44,568 | \$2,108 |
|  | BAP | Sell | \$41.71 | -100 | \$4,171.00 | (\$15) | \$48,739 | \$2,093 |
| $10 \backslash 24$ | ACGY | Sell | \$18.32 | -200 | \$3,664.00 | \$180 | \$52,403 | \$2,273 |
|  | BAP | Buy | \$41.52 | 200 | (\$8,304.00) |  | \$44,099 | \$2,273 |
|  | BAP | Sell | \$41.76 | -200 | \$8,352.00 | \$48 | \$52,451 | \$2,321 |
|  | CSCO | Buy | \$23.15 | 300 | (\$6,945.00) |  | \$45,506 | \$2,321 |
|  | csco | Sell | \$23.39 | -300 | \$7,017.00 | \$72 | \$52,532 | \$2,393 |
| $10 \backslash 25$ | ACGY | Buy | \$18.39 | 200 | (\$3,678.00) |  | \$48,844 | \$2,393 |
|  | ACGY | Sell | \$18.57 | -200 | \$3,714.00 | \$36 | \$52,558 | \$2,429 |
|  | DPTR | Buy | \$21.29 | 200 | (\$4,258.00) |  | \$48,300 | \$2,429 |
|  | DPTR | Sell | \$22.51 | -200 | \$4,502.00 | \$244 | \$52,802 | \$2,673 |
| $10 \backslash 26$ | ACGY | Buy | \$18.69 | 200 | (\$3,738.00) |  | \$49,064 | \$2,673 |
|  | ACGY | Sell | \$18.56 | -200 | \$3,712.00 | (\$26) | \$52,776 | \$2,647 |
|  | BAP | Buy | \$42.45 | 200 | (\$8,490.00) |  | \$44,286 | \$2,647 |
|  | CSCO | Buy | \$23.94 | 200 | (\$4,788.00) |  | \$39,498 | \$2,647 |
|  | cSCO | Sell | \$23.88 | -200 | \$4,776.00 | \$12 | \$44,274 | \$2,659 |
| $10 \backslash 27$ | BAP | Sell | \$42.75 | -200 | \$8,550.00 | \$60 | \$52,824 | \$2,717 |
|  | DPTR | Buy | \$23.17 | 200 | (\$4,634.00) |  | \$48,190 | \$2,717 |
|  | DPTR | Sell | \$23.03 | -200 | \$4,606.00 | (\$28) | \$52,796 | \$2,689 |

Table 3.4.5 Jorge week 5

Acergy (ACGY): This Week I made three trades with ACGY. The first was on Monday when I caught a buy signal towards the end of the day. The price was increasing at the close of Monday, so I decided to hold onto my 200 shares. The 200 shares that I had purchased for $\$ 17.42$ each were now worth $\$ 18.32$ each on Tuesday. I held on to them until the next sell signal, and sold all 200 for a profit of $\$ 180$. My second trade was on Wednesday when I purchased 200 shares at $\$ 18.39$ each and then sold them later that day
at $\$ 18.57$ each, earning me a profit of $\$ 36$. My final trade was on Thursday when I purchased 200 shares at $\$ 18.69$ and sold them all later at $\$ 18.56$. I lost $\$ 26$ on this trade.


Figure 3.4.23 ACGY week 5

Credicorp Ltd. (BAP): Early Monday morning a weak buy signal from BAP lead me to purchase 100 shares at $\$ 41.76$ each. The trend did not last long, and I was forced to cut my losses and sell all 100 shares back at $\$ 41.7$ each, causing me to lose $\$ 15$ right away. On Wednesday, however, I was able to catch a buy signal which turned out to be beneficial. I bought 200 shares at $\$ 41.52$ each, and sold them later that day at $\$ 41.76$ each, earning me a profit of $\$ 48$. On Thursday, I purchased 200 shares from the company at $\$ 42.45$ each. I did not sell those shares until Friday for $\$ 42.75$ each, earning me $\$ 60$ on the trade.


Figure 3.4.24 BAP week 5

Cisco Systems (CSCO): The first buy signal I caught from Cisco was on Tuesday. Because it was a strong signal, I purchased 300 shares at $\$ 23.15$ each. I held on to the shares until the next sell signal, when I sold all 300 at $\$ 23.39$ each, earning me a profit of $\$ 72$. I bought 200 more shares on Thursday at $\$ 23.94$ each. I was forced to sell them at $\$ 23.87$ when I began to lose money. I lost a total of $\$ 12$ on the trade.

Delta Petroleum Corp (DPTR): I got very lucky on Wednesday when I purchased 200 shares at $\$ 21.29$ each. I was able to sell them later that day at $\$ 22.51$ each, earning me a profit of 244 ! I thought I could make another large profit on Thursday when I saw a strong buy signal, so I purchased 200 more shares at $\$ 23.17$ each. This signal didn't turn out like the other, and I was forced to sell the shares at $\$ 23.03$ each, causing me to lose \$28.


Figure 3.4.25 CSCO week 5


Figure 3.4.26 DPTR week 5

## Week 6

| Date | Symbol | Action | Price | Shares | Net Cost/ <br> Proceeds | Profit/ <br> Loss | Total <br> Cash | Accum <br> Gain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10\30 | BDK | Buy | \$84.34 | 200 | (\$16,868.00) |  | \$35,460 | \$2,108 |
|  | BDK | Sell | \$84.45 | -200 | \$16,890.00 | \$22 | \$52,350 | \$2,130 |
|  | CSCO | Buy | \$23.48 | 200 | (\$4,696.00) |  | \$47,654 | \$2,130 |
|  | CSCO | Sell | \$23.86 | -200 | \$4,772.00 | \$76 | \$52,426 | \$2,206 |
|  |  |  |  |  |  |  | \$52,426 | \$2,206 |
| $10 \backslash 31$ | ACGY | Buy | \$18.07 | 200 | (\$3,614.00) |  | \$48,812 | \$2,206 |
|  | ACGY | Sell | \$18.19 | -200 | \$3,638.00 | \$24 | \$52,450 | \$2,230 |
|  | DPTR | Buy | \$25.18 | 200 | (\$5,036.00) |  | \$47,414 | \$2,230 |
|  | DPTR | Sell | \$25.26 | -200 | \$5,052.00 | \$26 | \$52,466 | \$2,256 |
|  |  |  |  |  |  |  | \$52,466 | \$2,256 |
| $1 \backslash 1$ | ACGY | Buy | \$18.71 | 200 | (\$3,742.00) |  | \$48,724 | \$2,256 |
|  | ACGY | Sell | \$18.49 | -200 | \$3,698.00 | (\$46) | \$52,422 | \$2,210 |
|  | DPTR | Buy | \$24.44 | 200 | (\$4,888.00) |  | \$47,534 | \$2,210 |
|  | DPTR | Sell | \$24.94 | -200 | \$4,988.00 | \$100 | \$52,522 | \$2,310 |
|  |  |  |  |  |  |  | \$52,522 | \$2,310 |
| 112 | BAP | Buy | \$14.12 | 200 | (\$2,824.00) |  | \$49,680 | \$2,310 |
|  | BAP | Sell | \$14.35 | -200 | \$2,870.00 | \$46 | \$52,550 | \$2,356 |
|  | BDK | Buy | \$84.52 | 200 | (\$16,904.00) |  | \$35,646 | \$2,356 |
|  |  |  |  |  |  |  | \$35,646 | \$2,356 |
| 113 | BDK | Sell | \$84.79 | -200 | \$16,958.00 | \$54 | \$52,604 | \$2,410 |
|  | CSCO | Buy | \$23.65 | 200 | (\$4,730.00) |  | \$47,874 | \$2,410 |
|  | CSCO | Sell | \$23.71 | -200 | \$4,742.00 | \$12 | \$52,616 | \$2,422 |

Table 3.4.6 Jorge Week 6

Acergy (ACGY): My first trade with ACGY this week was on Tuesday morning. The company started off strong, giving off a buy signal, so I purchased 200 shares at $\$ 18.07$. I sold the shares later that day at $\$ \$ 18.19$ each, when I saw a sell signal. I made $\$ 24$ on that trade. My next trade with ACGY was on Wednesday, when the company again started off string for the day, but shortly after began to decrease. I purchased 200 shares at $\$ 18.71$ and was later forced to sell them at $\$ 18.49$ each, losing a total of $\$ 46$. I made no further trades with ACGY this week.


Figure 3.4.27 ACGY week 6

Credicorp Ltd. (BAP): My only trade with BAP this week was a profitable one. On Thursday, I noticed an early buy signal from the MACD, and purchased 200 shares at $\$ 14.12$ each. At the next sell signal on that same day, I sold all 200 shares at $\$ 14.35$ each, earning a total profit of $\$ 46$. I did not trade again with BAP because I did not catch any other buy signals from the company.

Black \& Decker (BDK): After a weak buy signal from BDK on Monday, I purchased 200 shares at $\$ 84.34$ each. I held on to them for a short while until the sell signal later that day. I sold all 200 shares at $\$ 84.45$ each, for a total profit of $\$ 22$. My next purchase from the company was on Thursday, when I purchased 200 shares at $\$ 84.52$ each. I held onto the stocks until the next day, when I sold all 200 for $\$ 84.79$ each. This trade earned me a total profit of $\$ 54$.


Figure 3.4.28 BAP week 6


Figure 3.4.29 BDK week 6

Cisco Systems (CSCO): My first trade with CSCO was a very profitable one. On Monday I purchased 200 shares early in the morning. Later that day, after raising a total of $\$ 0.38$ per share, I sold all 200 shares for a total profit of $\$ 76$. I traded again with CSCO later in the week. On Friday I purchased 200 shares at $\$ 23.65$ each. I held on to them until the end of the day, when I sold them all at $\$ 23.71$ each. I earned a total profit of $\$ 12$ on the trade.


Figure 3.4.30 CSCO week 6

Delta Petroleum Corp (DPTR): My first trade with DPTR was on Tuesday, when I purchased 200 shares at $\$ 25.18$ each. I sold them all later when I thought a sell signal was coming for $\$ 25.26$. I was wrong about the signal, but I still made a profit of $\$ 26$. My next trade was on Wednesday, when DPTR began to recover from a large drop. I purchased 200 shares at $\$ 24.44$ and sold them at the end of the day at $\$ 24.94$. I made a profit of $\$ 100$ on this trade.


Figure 3.4.31 DPTR week 6

## Week 7

|  |  |  |  |  | Net Cost/ | Profit/ | Total | Accum |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | :--- |
| Date | Symbol | Action | Price | Shares | Proceeds | Loss | Cash | Gain |
| $11 \backslash 6$ | TM | BUY | $\$ 121.33$ | 200 | $(\$ 24,266.00)$ |  | $\$ 28,350$ | $\$ 2,422$ |
|  | BAP | Buy | $\$ 45.19$ | 200 | $(\$ 9,038.00)$ |  | $\$ 19,312$ | $\$ 2,422$ |
|  | BAP | Sell | $\$ 45.56$ | -200 | $\$ 9,112.00$ | $\$ 74$ | $\$ 28,424$ | $\$ 2,496$ |
|  |  |  |  |  |  |  | $\$ 28,424$ | $\$ 2,496$ |
| $11 \backslash 7$ | TM | Sell | $\$ 122.93$ | -200 | $\$ 24,586.00$ | $\$ 320$ | $\$ 53,010$ | $\$ 2,816$ |
|  | SUNW | Buy | $\$ 5.39$ | 200 | $(\$ 1,078.00)$ |  | $\$ 51,932$ | $\$ 2,816$ |
|  | SUNW | Sell | $\$ 5.46$ | -200 | $\$ 1,092.00$ | $\$ 24$ | $\$ 53,024$ | $\$ 2,840$ |
|  |  |  |  |  |  |  | $\$ 53,024$ | $\$ 2,840$ |
| $11 \backslash 8$ |  |  |  |  |  |  |  |  |
|  | SUNW | Buy | $\$ 5.43$ | 200 | $(\$ 1,086.00)$ |  | $\$ 51,938$ | $\$ 2,840$ |
|  | SUNW | Sell | $\$ 5.44$ | -200 | $\$ 1,088.00$ | $\$ 2$ | $\$ 53,026$ | $\$ 2,842$ |
|  | DPTR | Buy | $\$ 26.43$ | 200 | $(\$ 5,286.00)$ |  | $\$ 47,740$ | $\$ 2,842$ |
|  | DPTR | Sell | $\$ 26.93$ | -200 | $\$ 5,386.00$ | $\$ 100$ | $\$ 53,216$ | $\$ 2,942$ |
|  |  |  |  |  |  |  | $\$ 53,216$ | $\$ 2,942$ |
| $11 \backslash 9$ | TM | Buy | $\$ 123.02$ | 200 | $(\$ 24,604.00)$ |  | $\$ 28,522$ | $\$ 2,942$ |
|  | TM | Sell | $\$ 122.83$ | -200 | $\$ 24,566.00$ | $(\$ 38)$ | $\$ 53,088$ | $\$ 2,904$ |
|  | DPTR | Buy | $\$ 27.14$ | 200 | $(\$ 5,428.00)$ |  | $\$ 47,660$ | $\$ 2,904$ |
|  | DPTR | Sell | $\$ 27.66$ | -200 | $\$ 5,532.00$ | $\$ 104$ | $\$ 53,192$ | $\$ 3,008$ |
|  |  |  |  |  |  |  | $\$ 53,192$ | $\$ 3,008$ |
| $11 \backslash 10$ | SUNW | Buy | $\$ 5.30$ | 200 | $(\$ 1,060.00)$ |  | $\$ 52,132$ | $\$ 3,008$ |
|  | SUNW | Sell | $\$ 5.27$ | -200 | $\$ 1,054.00$ | $(\$ 6)$ | $\$ 53,186$ | $\$ 3,302$ |
|  | BAP | Buy | $\$ 46.18$ | 200 | $(\$ 9,236.00)$ |  | $\$ 43,950$ | $\$ 3,002$ |
|  | BAP | Sell | $\$ 46.25$ | -200 | $\$ 9,250.00$ | $\$ 14$ | $\$ 53,200$ | $\$ 3,016$ |

Table 3.4.7 Jorge week 7

Credicorp Ltd (BAP): This week showed some decent profit from BAP. My first trade on Monday earned me a total of $\$ 74$. I purchased 200 shares at $\$ 45.19$, and sold them at the sell signal for $\$ 45.56$ each. My second trade with BAP was on Friday, when I purchased 200 shares at $\$ 46.18$ each. I held on to the shares until the next sell signal, which was later that day. I sold them at $\$ 46.25$ each, and earned a profit of $\$ 14$. I made no further trades with BAP this week.


Figure 3.4.32 BAP week 7

Delta Petroleum (DPTR): I made two trades with DPTR this week. The first was on Wednesday when I purchased 200 shares at $\$ 26.43$ each, and later sold them that day for $\$ 26.93$ each. I made a total of $\$ 100$ on this trade. My second was on Thursday, when I purchased 200 shares at $\$ 26.14$ each, and then sold them at $\$ 26.66$ each, earning me a profit of $\$ 104$ each. Overall I had a good week with this stock.

Sun Microsystems (SUNW): This week did not have any good trades with SUNW. On Tuesday I purchased 200 shares at $\$ 5.39$, and later sold them at $\$ 5.46$. This earned me a profit of $\$ 24$. Later, on Wednesday, I purchased 200 shares at $\$ 5.43$, only to later sell them at $\$ 5.44$ and earned tiny profit of $\$ 2$. My final trade was on Friday, when I purchased 200 shares at $\$ 5.30$ each, and later sold them at $\$ 5.27$, for a loss of $\$ 6$.


Figure 3.4.33 DPTR week 7


Figure 3.4.34 SUNW week 7

Toyota Motors (TM): My first purchase with TM this week was on Tuesday, after the MACD had seemed to hit a low point. I purchased 200 shares at $\$ 121.33$ each, and held onto them until close. The next day, after the first signal, I sold all 200 shares at 122.93 each, earning me a profit of $\$ 320$. My second trade with TM happened on Thursday, when I purchased 200 shares for $\$ 123.02$ each. I sold them shortly after at $\$ 122.87$, losing a total of $\$ 38$. I did not make any other trades with TM this week.


Figure 3.4.35 TM week 7

## Week 8

|  |  |  |  |  | Net Cost/ | Profit/ | Total | Accum |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: | :--- |
| Date | Symbol | Action | Price | Shares | Proceeds <br> Loss | Cash | Gain |  |
| 111113 | ACGY | Buy | $\$ 19.73$ | 200 | $(\$ 3,946.00)$ |  | $\$ 49,254$ | $\$ 3,016$ |
|  | ACGY | Sell | $\$ 19.86$ | -200 | $\$ 3,972.00$ | $\$ 26$ | $\$ 53,226$ | $\$ 3,042$ |
|  |  |  |  |  |  |  | $\$ 53,226$ | $\$ 3,042$ |
| 11114 | CSCO | Buy | $\$ 26.67$ | 200 | $(\$ 5,334.00)$ |  | $\$ 47,892$ | $\$ 3,042$ |
|  | CSCO | Sell | $\$ 26.70$ | -200 | $\$ 5,340.00$ | $\$ 6$ | $\$ 53,232$ | $\$ 3,048$ |
|  |  |  |  |  |  |  | $\$ 53,232$ | $\$ 3,048$ |
| 11115 | ACGY | Buy | $\$ 19.99$ | 200 | $(\$ 3,998.00)$ |  | $\$ 49,234$ | $\$ 3,048$ |
|  | ACGY | Sell | $\$ 20.13$ | -200 | $\$ 4,026.00$ | $\$ 28$ | $\$ 53,260$ | $\$ 3,076$ |
|  | BDK | Buy | $\$ 86.88$ | 200 | $(\$ 17,376.00)$ |  | $\$ 35,884$ | $\$ 3,076$ |
|  | BDK | Sell | $\$ 86.99$ | -200 | $\$ 17,398.00$ | $\$ 22$ | $\$ 53,282$ | $\$ 3,098$ |
|  |  |  |  |  |  |  | $\$ 53,282$ | $\$ 3,098$ |
| 11116 | CSCO | Buy | $\$ 26.83$ | 200 | $(\$ 5,366.00)$ |  | $\$ 47,916$ | $\$ 3,098$ |
|  | CSCO | Sell | $\$ 26.90$ | -200 | $\$ 5,380.00$ | $\$ 24$ | $\$ 53,296$ | $\$ 3,132$ |
|  | CSCO | Buy | $\$ 27.08$ | 200 | $(\$ 5,416.00)$ |  | $\$ 47,880$ | $\$ 3,132$ |
|  | CSCO | Sell | $\$ 27.22$ | -200 | $\$ 5,444.00$ | $\$ 28$ | $\$ 53,324$ | $\$ 3,160$ |
|  |  |  |  |  |  |  | $\$ 53,324$ | $\$ 3,160$ |
| 11117 | ACGY | Buy | $\$ 19.27$ | 200 | $(\$ 3,854.00)$ |  | $\$ 49,470$ | $\$ 3,160$ |
|  | ACGY | Sell | $\$ 19.52$ | -200 | $\$ 3,904.00$ | $\$ 50$ | $\$ 53,374$ | $\$ 3,210$ |
|  | BDK | Buy | $\$ 87.79$ | 200 | $(\$ 17,558.00)$ |  | $\$ 35,816$ | $\$ 3,210$ |
|  | BDK | Sell | $\$ 88.16$ | -200 | $\$ 17,632.00$ | $\$ 74$ | $\$ 53,448$ | $\$ 3,284$ |

Table 3.4.8 - Week 8 Jorge

Acergy (ACGY): My first trade this week with ACGY was on Monday. I purchased 200 shares after the first buy signal at $\$ 19.73$ each. Later that day, I sold all 200 shares at $\$ 19.86$ each, earning me a total profit of $\$ 26$. My second trade was on Wednesday, when I purchased 300 shares at $\$ 19.99$ because the buy signal was strong, and then later sold them at $\$ 20.13$ each. This earned me a total profit of $\$ 28$. My third and final trade with ACGY was on Friday. I purchased 200 shares at $\$ 19.27$ each, and sold them later in the day at $\$ 19.52$ each, earning me a total of $\$ 50$ profit. I did not make any other trades with ACGY this week.


Figure 3.4.36 - ACGY Week 8

Black \& Decker (BDK): I traded twice with BDK this week. The first was on Wednesday, when I purchased 200 shares at $\$ 86.88$ each, and then later sold all 200 shares at $\$ 88.99$, earning me a total of $\$ 22$. My next and final trade was on Friday, when I purchased 200 shares at $\$ 87.79$ and sold them later at $\$ 88.16$, earning me a profit of $\$ 74$. I made a decent profit considering I only made two trades with the company.

Cisco Systems (CSCO): My first trade with CSCO occurred on Tuesday, when I purchased 200 shares at $\$ 26.67$ each just as the price began to rise. I held onto them until the end of the day, when I sold them back at $\$ 26.70$, making a small profit of $\$ 6$. My second trade with CSCO was on Thursday, when I purchased 200 shares early in the day at $\$ 26.83$ each. I sold those shares later that day at $\$ 26.90$ each, earning me a profit of \$24. My final trade was on Thursday again, when I purchased 200 shares at $\$ 27.08$ and then later sold them at $\$ 27.22$. This trade earned me a total profit of $\$ 28$.


Figure 3.4.37 - BDK week 8


Figure 3.4.38-CSCO Week 8

## Week 9

| e | Symbol | Action | Price | Shares | Net Cost/ <br> Proceeds | $\begin{aligned} & \text { Profit/ } \\ & \text { Loss } \end{aligned}$ | Total <br> Cash | Accum <br> Gain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11120 | DPTR | Buy | \$26.75 | 200 | (\$5,350.00) |  | \$48,098 | \$3,284 |
|  | DPTR | Sell | \$26.92 | -200 | \$5,384.00 | \$34 | \$53,482 | \$3,318 |
|  | BDK | Buy | \$87.98 | 200 | (\$17,596.00) |  | \$35,886 | \$3,318 |
|  | BDK | Sell | \$88.09 | -200 | \$17,618.00 | \$22 | \$53,504 | \$3,340 |
|  |  |  |  |  |  |  | \$53,504 | \$3,340 |
| 11121 | DPTR | Buy | \$27.07 | 200 | (\$5,414.00) |  | \$48,090 | \$3,340 |
|  | DPTR | Sell | \$27.22 | -200 | \$5,444.00 | \$30 | \$53,534 | \$3,370 |
|  | CSCO | Buy | \$26.84 | 200 | (\$5,368.00) |  | \$48,166 | \$3,370 |
|  | CSCO | Sell | \$27.03 | -200 | \$5,406.00 | \$38 | \$53,572 | \$3,408 |
|  | BAP | Buy | \$42.39 | 200 | (\$8,478.00) |  | \$45,094 | \$3,408 |
|  | BAP | Sell | \$42.94 | -200 | \$8,588.00 | \$110 | \$53,682 | \$3,508 |
|  |  |  |  |  |  |  | \$53,682 | \$3,508 |
| 11122 | Csco | Buy | \$26.95 | 200 | (\$5,390.00) |  | \$48,292 | \$3,508 |
|  | CSCO | Sell | \$26.91 | -200 | \$5,382.00 | (\$8) | \$53,674 | \$3,500 |
|  |  |  |  |  |  |  | \$53,674 | \$3,500 |
| 11123 | DPTR | Buy | \$28.42 | 200 | (\$5,684.00) |  | \$47,990 | \$3,500 |
|  | DPTR | Sell | \$28.60 | -200 | \$5,720.00 | \$46 | \$53,710 | \$3,546 |
|  | CSCO | Buy | \$26.86 | 200 | (\$5,372.00) |  | \$48,338 | \$3,546 |
|  | CSCO | Sell | \$26.92 | -200 | \$5,384.00 | \$12 | \$53,722 | \$3,558 |
|  |  |  |  |  |  |  | \$53,722 | \$3,558 |
| 11124 | BAP | Buy | \$40.70 | 200 | (\$8,140.00) |  | \$45,582 | \$3,558 |
|  | BAP | Sell | \$41.07 | -200 | \$8,214.00 | \$74 | \$53,796 | \$3,632 |
|  | BDK | Buy | \$87.73 | 200 | (\$17,546.00) |  | \$36,250 | \$3,632 |
|  | BDK | Sell | \$87.56 | -200 | \$17,512.00 | (\$66) | \$53,762 | \$3,566 |

Table 3.4.9 Jorge week 9

Credicorp Ltd (BAP): This week with BAP was a very profitable one. My first trade with the company was on Tuesday. A buy signal late in the day made me decide to purchase 200 shares at $\$ 42.39$ each. I held on to all 200 shares until later that day, when I sold them, after the sell signal, at $\$ 42.94$ each. My total profit on the trade was $\$ 110$,
which is the highest profit of the week. My second trade was on Friday, when another buy signal led me to purchase 200 shares at $\$ 40.70$ each. I sold all 200 shares later that day at $\$ 41.07$ each. My total profit on that trade was $\$ 74$.


Figure 3.4.39 BAP week 9

Black \& Decker (BDK): This week was not very profitable with BDK. My first trade, on Monday, when I purchased 200 shares at $\$ 87.98$ each and then sold them at $\$ 88.09$ each, ended with a small profit of $\$ 22$. However, on Friday I purchased 200 shares at $\$ 87.83$ each but was forced to sell them later that day at $\$ 87.56$ each. I lost $\$ 66$ on this trade.

Cisco Systems (CSCO): I made a small profit from trading CSCO shares this week. My first trade was on Tuesday, when I purchased 200 shares at $\$ 26.84$ each. I sold them later that day at $\$ 27.03$ each for a total profit of $\$ 38$. My second trade was on Wednesday, when I purchased 200 shares at $\$ 26.95$. I sold them later at $\$ 26.91$ each, losing a total of
$\$ 8$ on the trade. My final trade was on Thursday when I purchased 200 shares at $\$ 26.86$ each and then sold them later that day at $\$ 26.92$ each, for a total profit of $\$ 12$.


Figure 3.4.40 BDK week 9


Figure 3.4.41 CSCO week 9

Delta Petroleum Corp (DPTR): My first trade with DPTR was on Monday, when I purchased 200 shares at $\$ 26.75$ each. I sold them later that day at $\$ 26.92$ each, for a total profit of $\$ 34$ on the trade. My second trade was on Tuesday, when I purchased 200 shares at $\$ 27.07$. I sold them later that day at $\$ 27.22$ each, earning a total profit of $\$ 30$ on the trade. My final trade was on Thursday, when I purchased 200 shares at $\$ 28.42$ each. I sold them later that day at $\$ 28.60$ each, for a total profit of $\$ 46$ on the trade.


Figure 3.4.42 DPTR week 9

## Week 10

|  |  |  |  |  | Net Cost/ | Profit/ | Total | Accum |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: | :--- |
| Date | Symbol | Action | Price | Shares | Proceeds | Loss | Cash | Gain |
| 11127 | ACGY | Buy | $\$ 20.73$ | 200 | $(\$ 4,146.00)$ |  | $\$ 49,616$ | $\$ 3,566$ |
|  | ACGY | Sell | $\$ 20.63$ | -200 | $\$ 4,126.00$ | $(\$ 20)$ | $\$ 53,742$ | $\$ 3,546$ |
|  | BAP | Buy | $\$ 40.05$ | 200 | $(\$ 8,010.00)$ |  | $\$ 45,732$ | $\$ 3,546$ |
|  | BAP | Sell | $\$ 39.98$ | -200 | $\$ 7,996.00$ | $(\$ 14)$ | $\$ 53,728$ | $\$ 3,532$ |
|  |  |  |  |  |  |  | $\$ 53,728$ | $\$ 3,532$ |
| 11128 | ACGY | Buy | $\$ 20.01$ | 200 | $(\$ 4,002.00)$ |  | $\$ 49,726$ | $\$ 3,532$ |
|  | ACGY | Sell | $\$ 20.34$ | -200 | $\$ 4,068.00$ | $\$ 66$ | $\$ 53,794$ | $\$ 3,598$ |
|  | BAP | Buy | $\$ 39.83$ | 200 | $(\$ 7,966.00)$ |  | $\$ 45,828$ | $\$ 3,598$ |
|  | BAP | Sell | $\$ 39.95$ | -200 | $\$ 7,990.00$ | $\$ 34$ | $\$ 53,818$ | $\$ 3,632$ |
|  | CSCO | Buy | $\$ 25.99$ | 200 | $(\$ 5,198.00)$ |  | $\$ 48,620$ | $\$ 3,632$ |
|  | CSCO | Sell | $\$ 26.72$ | -200 | $\$ 5,344.00$ | $\$ 146$ | $\$ 53,964$ | $\$ 3,778$ |
|  |  |  |  |  |  |  | $\$ 53,964$ | $\$ 3,778$ |
| 11129 | ACGY | Buy | $\$ 19.73$ | 200 | $(\$ 3,946.00)$ |  | $\$ 50,018$ | $\$ 3,778$ |
|  | ACGY | Sell | $\$ 19.84$ | -200 | $\$ 3,968.00$ | $\$ 22$ | $\$ 53,986$ | $\$ 3,800$ |
|  | BAP | Buy | $\$ 40.14$ | 200 | $(\$ 8,028.00)$ |  | $\$ 45,958$ | $\$ 3,800$ |
|  | BAP | Sell | $\$ 40.11$ | -200 | $\$ 8,022.00$ | $(\$ 6)$ | $\$ 53,980$ | $\$ 3,994$ |
|  |  |  |  |  |  |  | $\$ 53,980$ | $\$ 3,994$ |
| 11130 | BAP | Buy | $\$ 39.49$ | 200 | $(\$ 7,898.00)$ |  | $\$ 46,082$ | $\$ 3,994$ |
|  | BAP | Sell | $\$ 39.33$ | -200 | $\$ 7,866.00$ | $(\$ 22)$ | $\$ 53,948$ | $\$ 3,972$ |
|  | BDK | Buy | $\$ 85.15$ | 200 | $(\$ 17,030.00)$ |  | $\$ 36,918$ | $\$ 3,972$ |
|  | BDK | Sell | $\$ 85.66$ | -200 | $\$ 17,132.00$ | $\$ 102$ | $\$ 54,050$ | $\$ 4,074$ |
|  |  |  |  |  |  |  | $\$ 54,050$ | $\$ 4,074$ |
| $12 \backslash 1$ | ACGY | Buy | $\$ 19.33$ | 200 | $(\$ 3,866.00)$ |  | $\$ 50,184$ | $\$ 4,074$ |
|  | ACGY | Sell | $\$ 19.67$ | -200 | $\$ 3,934.00$ | $\$ 68$ | $\$ 54,118$ | $\$ 4,132$ |
|  | BDK | Buy | $\$ 84.77$ | 200 | $(\$ 16,954.00)$ |  | $\$ 37,164$ | $\$ 4,132$ |
|  | BDK | Sell | $\$ 84.78$ | -200 | $\$ 16,956.00$ | $\$ 2$ | $\$ 54,120$ | $\$ 4,134$ |

Table 3.4.10 - Jorge week 10

Acergy (ACGY): I made four trades with ACGY this week. The first was on Monday, when I purchased 200 shares at $\$ 20.73$ each, and later sold them at $\$ 20.63$ each. I lost $\$ 20$ on this trade. My next trade was on Tuesday, when I purchased 200 shares at $\$ 20.01$
each, and was able to sell them later at $\$ 20.34$ each, earning myself a profit of $\$ 66$. My third trade was on Wednesday, when I purchased 200 shares at $\$ 19.73$ each, and later sold them at $\$ 19.84$ each. I made $\$ 22$ on this trade. My final trade was on Friday, when I purchased 200 shares at $\$ 19.33$, and was able to sell them at $\$ 19.67$ later that day for a total profit of $\$ 68$ on the trade.


Figure 3.4.43 - ACGY week 10

Credicorp Ltd (BAP): I made four trades with BAP this week. On Monday I purchased 200 shares at $\$ 40.05$ each, but lost $\$ 14$ when I sold them at $\$ 39.98$ later that day. On Tuesday, I purchased 200 shares at $\$ 39.83$, and later sold them at $\$ 39.95$ each, earning myself a profit of $\$ 34$. I lost $\$ 6$ on my third trade, on Wednesday, when I purchased 200 shares at $\$ 40.14$ each and then sold them at $\$ 40.11$ each. My final trade was on Thursday, when I purchased 200 shares at $\$ 39.49$ each, and then sold them at $\$ 39.33$ each. I lost $\$ 22$ on the trade.


Figure 3.4.44-BAP week 10

Black \& Decker (BDK): I made two trades with BDK this week. On the first one, I purchased 200 shares at $\$ 85.15$ each, and then sold them at $\$ 85.66$ each. This earned me a profit of $\$ 102$. On my second trade, I purchased 200 shares at $\$ 84.77$ each, and then sold them at $\$ 84.78$ each. I only made $\$ 2$ on this trade. I made a total of $\$ 100$ this week with BDK.

Cisco Systems (CSCO): My only trade with CSCO was on Tuesday, when I purchased 200 shares at $\$ 25.99$ each, and then sold them later that day at $\$ 26.72$ each. I earned $\$ 146$ on this trade, and was the most profitable trade of the week.

## Earnings:

I earned $\$ 4134$ total in 192 trades. After brokerage costs (assuming $\$ 10 /$ trade), the new total is $\$ 2214$. This means I made a total of $4.4 \%$. For the amount of effort put into trading, I do not feel that this method was effective in making a profit.


Figure 3.4.45 - BDK week 10


Figure 3.4.46 - CSCO Week 10

### 3.5 Nick's Transactions

## Week 1

| Date | Symbol | Action | Price | Shares | Cost | Profit | Total Cash | Accum. <br> Gain |
| :--- | :---: | :---: | :---: | :---: | :---: | ---: | ---: | :--- |
| 25/Sep | BDK | Buy | $\$ 79.00$ | 151 | $(\$ 11,929)$ |  | $\$ 38,071$ |  |
| 25/Sep | CNBC | Buy | $\$ 15.90$ | 200 | $(\$ 3,180)$ |  | $\$ 34,891$ |  |
| 25/Sep | CSCO | Buy | $\$ 23.23$ | 344 | $(\$ 991.12)$ |  | $\$ 26,899.88$ |  |
| 25/Sep | DPTR | Buy | $\$ 20.20$ | 247 | $(\$ 4,989.4)$ |  | $\$ 21,910.48$ |  |
| 25/Sep | SUNW | Buy | $\$ 5.13$ | 1800 | $(\$ 9234)$ |  | $\$ 12,676.48$ |  |
| 25/Sep | TM | Buy | $\$ 108.48$ | 110 | $(\$ 1932.8)$ |  | $\$ 743.68$ |  |

Table 3.5.1 Nick Week 1

My first round of stock selection was based upon diversifying highly technical rated companies. I chose to incorporate stock from the energy, financial, hi-tech, and automotive industries. With the falling gas prices, investors have confidence in energy providers. Even though the automotive industry is staggering in America, our Japanese counterparts are prospering. With cheaper manufacturing processes and more fuel efficient vehicles, I felt Toyota was a wise buy.

## Week 2

| Date | Symbol | Action | Price | Shares | Cost | Profit | Total <br> Cash | Accum. <br> Gain |
| :--- | :--- | ---: | :--- | :--- | ---: | ---: | :--- | ---: |
| 2-Oct | CSCO | Sell | $\$ 23.01$ | 344 | $\$ 7,915.44$ | $(\$ 75.68)$ | $\$ 8659.12$ | -75.68 |
| 2-Oct | DPTR | Sell | $\$ 21.50$ | 247 | $\$ 5,310.5$ | $\$ 321.1$ | $\$ 13969.62$ | 245.42 |
| 3-Oct | DPTR | Buy | $\$ 21.40$ | 247 | $(\$ 5,285.8)$ |  | $\$ 8683.82$ |  |
| 4-Oct | CNBC | Sell | $\$ 15.85$ | 200 | $\$ 3,170$ | $(\$ 10)$ | $\$ 11853.82$ | 235.42 |
| 4-Oct | SUNW | Sell | $\$ 4.92$ | 1800 | $\$ 8,856$ | $(\$ 378)$ | $\$ 20709.82$ | -142.58 |
| 5-Oct | DPTR | Sell | $\$ 22.93$ | 247 | $\$ 5,663.71$ | $\$ 377.91$ | $\$ 26373.53$ | 235.33 |

Table 3.5.2 Nick Week2

Delta Petroleum Corp (DPTR): There were no strong signals Monday as the stock price stayed remarkably level. However, I was forced to sell all my shares early Tuesday when there was a sudden substantial price drop. I sold all shares at 21.50 ; this earned me $\$ 321.10$ because I had purchased it for $\$ 20.20$. There were strong buy signals Wednesday morning and I went back in at $\$ 21.40$; the stock continued to rise all day and I left it to grow. I sold amid some strong buy signals Friday before noon - the sell price was $\$ 22.93$. This left a $\$ 377.91$ profit.


Figure 3.5.1 Delta Petroleum Corp. Week 2

Center Bancorp (CNBC): I lost some money in this stock by ignoring sell signals. There was a higher opening price than expected on Thursday, but I did not acknowledge the charts and found the price had dropped by mid day. I sold at 15.85 and lost $\$ 10$ overall.

Toyota Motors (TM): No strong sell signals for this week. Toyota seems to remain on a conservative upward trend. I think the price may drop some next week and I will be forced to dump shares before it dips below $\$ 110.00$.


Figure 3.5.1 Center Bancorp Week 2


Figure 3.5.2 Toyota Motors Week 2

Cisco Systems (CSCO): Strong sell signals Monday afternoon forced me to sell Cisco stock. I sold at $\$ 23.01$ with a loss of $\$ 75.68$.


Figure 3.5.3 Cisco Systems Week 2

Black \& Decker (BDK): I held onto Black \& Decker - there were several minor sell signals but overall an upward trend.


Figure 3.5.14 Black \& Decker Week 2

Sun Microsystems (SUNW): I sold Sun stock on Thursday when there was a sharp downturn in price. I got out at 4.92 and sold all shares; this accounted for a loss of $\$ 378.00$. Overall, I would have spent $\$ 120.00$ in brokerage fees - my cumulative profit is $\$ 235.33$. Next week will be more active, with several stocks peaking during week $2-$ they may fall in week 3.


Figure 3.5.5 Sun Microsystems Week 2

## Week 3

| Date | Symbol | Action | Price | Shares | Cost | Profit | Total Cash | Accum. <br> Gain |
| :--- | :---: | :---: | :--- | :--- | ---: | ---: | ---: | ---: |
| 10/Oct | ACGY | Buy | $\$ 16.83$ | 300 | $(\$ 5,049)$ |  | $\$ 21324.53$ |  |
| 10/Oct | DPTR | Buy | $\$ 24.03$ | 500 | $(\$ 12,015)$ |  | $\$ 9309.53$ |  |
| 10/Oct | ACGY | Sell | $\$ 17.31$ | 300 | $\$ 5,193$ | $\$ 144$ | $\$ 14502.53$ | $\$ 379.33$ |
| 11/Oct | ACGY | Buy | $\$ 17.40$ | 250 | $(\$ 4,350)$ |  | $\$ 10152.53$ |  |
| 11/Oct | BAP | Buy | $\$ 42.87$ | 200 | $(\$ 8,574)$ |  | $\$ 1578.53$ |  |
| 11/Oct | CNBC | Buy | $\$ 15.85$ | 200 | $(\$ 3,170)$ |  | $(\$ 1591.47)$ |  |
| 11/Oct | DPTR | Sell | $\$ 24.40$ | 500 | $\$ 12,200$ | $\$ 185$ | $\$ 10608.53$ | $\$ 564.33$ |
| 12/Oct | BDK | Sell | $\$ 84.10$ | 151 | $\$ 12,699.1$ | $\$ 770.1$ | $\$ 23307.63$ | $\$ 1,334.43$ |
| 13/Oct | DPTR | Buy | $\$ 23.83$ | 200 | $(\$ 4,766)$ |  | $\$ 18541.63$ |  |
| 13/Oct | ACGY | Sell | $\$ 17.10$ | 250 | $\$ 4,275$ | $(\$ 75)$ | $\$ 22816.63$ | $\$ 1,259.43$ |
| 13/Oct | BAP | Sell | $\$ 43.50$ | 200 | $\$ 8,700$ | $\$ 126$ | $\$ 31516.63$ | $\$ 1,385.43$ |
| 13/Oct | CNBC | Sell | $\$ 16.15$ | 200 | $\$ 3,230$ | $\$ 60$ | $\$ 34746.63$ | $\$ 1,445.43$ |
| 13/Oct | TM | Sell | $\$ 115.74$ | 110 | $\$ 12,731.4$ | $\$ 798.6$ | $\$ 47478.03$ | $\$ 2,244.03$ |

Table 3.5.3 Nick Week 3

Acergy (ACGY): There was a moderately strong run in ACGY stock over the course of Tuesday. I bought in early with 300 shares at $\$ 16.83$ and chose to act on a minor sell
signal in the afternoon at $\$ 17.31$ - this accounted for a profit of $\$ 144.00$. After what I though would be another strong day, I bought back in Wednesday with fewer shares (250 @ \$17.40); the initial activity and higher than average opening price fell throughout the day, but I held on to the stock. I did not sell until Friday at $\$ 17.21$ when again there were stronger sell signals - this time I couldn't ignore them and had to accept a $\$ 75.00$ loss.


Figure 3.5.6 Acergy Week 3

Black \& Decker (BDK): I took a more conservative approach with my BDK stock this week. There was a strong upward trend during Thursday and Friday. I chose to sell the stock at $\$ 84.10$ on Thursday towards the end of a very strong run where the price jumped nearly $5 \%$ in one day. I made a profit of $\$ 770$ on this transaction.


Figure 3.5.7 Black \& Decker Week 3

Sun Microsystems (SUNW): There were moderately strong buy signals all day Thursday. I bought in with 1000 shares at $\$ 5.02$ - we will see what this brings in week 4 .


Figure 3.5.8 Sun Microsystems Week 3

Credicorp Ltd. (BAP): There were minor buy signals Wednesday - I went in at $\$ 42.87$ for 200 shares. I sold Friday after a strong run for $\$ 43.50$ - this netted a profit of $\$ 126.00$. This accounted for a profit of $\$ 185.00$. I went back in Friday for fewer shares (200) at $\$ 23.83$.


Figure 3.5.9 Credicorp Ltd. Week 3

Delta Petroleum (DPTR): There were moderately strong buy signals Tuesday. I chose to purchase 500 shares at $\$ 24.03$ - as I watched the stock climb slightly on Wednesday, towards the end of the day some sell signals appeared and I let go at $\$ 24.40$.


Figure 3.5.10 Delta Petroleum Week 3

Toyota Motors (TM): Toyota climbed strongly as I expected. After the news of increased production, investors felt more apt to hold onto the stock for a longer period of time. I sold my TM shares at $\$ 115.74$ - this accounted for a $\$ 798$ profit.


Figure 3.5.11 Toyota Motors Week 3

Center Bancorp (CNBC): I went into CNBC Wednesday for $\$ 15.85$ - I purchased 200 shares. There was a moderate run on Friday and I sold at $\$ 16.15$. This was a $\$ 60$ profit.


Figure 3.5.12 Center Bancorp Week 3

## Week 4

| Date | Symbol | Action | Price | Shares | Cost | Profit | Total Cash | Accum. Gain |
| :--- | :---: | :---: | :--- | :---: | :--- | :--- | :--- | ---: |
| 16/Oct | ACGY | Buy | $\$ 17.24$ | 400 | $(\$ 6,896)$ |  | $\$ 40,582.03$ |  |
| 16/Oct | BDK | Buy | $\$ 85.74$ | 100 | $(\$ 8,574)$ |  | $\$ 32,008.03$ |  |
| 16/Oct | ACGY | Sell | $\$ 17.44$ | 400 | $\$ 6,976$ | $\$ 80$ | $\$ 38,984.03$ | $\$ 2,324.03$ |
| 17/Oct | BDK | Sell | $\$ 84.90$ | 100 | $\$ 8,490$ | $(\$ 84)$ | $\$ 47,474.03$ | $\$ 2,240.03$ |
| 18/Oct | CNBC | Buy | $\$ 16.00$ | 600 | $(\$ 9,600)$ |  | $\$ 37,874.03$ |  |
| 18/Oct | SUNW | Buy | $\$ 5.23$ | 800 | $(\$ 4,184)$ |  | $\$ 33,690.03$ |  |
| 19/Oct | BDK | Buy | $\$ 85.36$ | 100 | $(\$ 8,536)$ |  | $\$ 25,154.03$ |  |
| 19/Oct | CNBC | Sell | $\$ 15.92$ | 600 | $\$ 9,552$ | $(\$ 48)$ | $\$ 34,706.03$ | $\$ 2,192.03$ |
| 19/Oct | DPTR | Sell | $\$ 25.81$ | 200 | $\$ 5,162$ | $\$ 396$ | $\$ 39,868.03$ | $\$ 2,588.03$ |
| 20/Oct | BDK | Sell | $\$ 83.74$ | 100 | $\$ 8,374$ | $(\$ 162)$ | $\$ 48,242.03$ | $\$ 2,426.03$ |
| 20/Oct | SUNW | Sell | $\$ 5.17$ | 800 | $\$ 4,136$ | $(\$ 48)$ | $\$ 52,378.03$ | $\$ 2,378.03$ |

Table 3.5.4 Nick Week 4

Black \& Decker (BDK): There were some very strong initial buy signals Monday - the opening few hours of BDK were very active. I chose to wait to see if the trend would last all day and purchased 100 shares at $\$ 85.74$. I was surprised to see such a downward trend on Tuesday; I was forced to sell at $\$ 84.90$ - loss of $\$ 84.00$. Again I chose to accept
a minor buy signal Thursday afternoon after the price had become steady over Wednesday and Thursday. BDK took a major hit Friday and I got out at $\$ 83.74$ - loss of \$162.00.


Figure 3.5.13 Black \& Decker Week 4

Acergy (ACGY): There was a moderate run in ACGY stock on Monday. I chose to go in for 40 shares at $\$ 17.24$. I sold off in the late afternoon for $\$ 17.44$ and made a profit of $\$ 80.00$.


Figure 3.5.14 Acergy Week 4

Sun Microsystems (SUNW): I chose to buy into Sun on Wednesday - there was a moderate run for the first half of the day. I purchased 800 shares at $\$ 5.23$. I sold my
shares early Friday after what looked to be more erratic behavior - I sold at $\$ 5.17$ for a loss of \$48.00.


Figure 3.5.15 Sun Microsystems Week 4

Delta Petroleum (DPTR): From Tuesday to Thursday DPTR had some strong gains. I purchased shares at $\$ 23.83$ last week and wanted to profit during the mid-week trend. I sold on Thursday for $\$ 25.81$ - this accounted for a profit of $\$ 396.00$.


Figure 3.5.16 Delta Petroleum Week 4

Center Bancorp (CNBC): I bought into CNBC stock at $\$ 16.00$ on Wednesday during a late afternoon run. The stock behaved erratically on Thursday and I got rid of my shares during a rapid downward trend. I got out of the stock at $\$ 15.92$ and lost $\$ 48.00$.


Figure 3.5.17 Center Bancorp Week 4

## Week 5

| Date | Symbol | Action | Price | Shares | Cost | Profit | Total Cash | Accum. <br> Gain |
| :--- | :---: | :---: | :--- | :---: | ---: | ---: | :--- | :--- |
| 23/Oct | ACGY | Buy | $\$ 17.41$ | 400 | $(\$ 6,964)$ |  | $\$ 45,414.03$ |  |
| 23/Oct | CNBC | Buy | $\$ 15.92$ | 600 | $(\$ 9,552)$ |  | $\$ 35,862.03$ |  |
| 24/Oct | BDK | Buy | $\$ 83.38$ | 120 | $(\$ 10,005.60)$ |  | $\$ 25,856.43$ |  |
| 24/Oct | CSCO | Buy | $\$ 24.36$ | 400 | $(\$ 9,744)$ |  | $\$ 16,112.43$ |  |
| 24/Oct | SUNW | Buy | $\$ 5.17$ | 2000 | $(\$ 10,340)$ |  | $\$ 5,772.43$ |  |
| 24/Oct | ACGY | Sell | $\$ 18.25$ | 400 | $\$ 7,300$ | $\$ 336$ | $\$ 13,072.43$ | $\$ 2,714.03$ |
| 24/Oct | CNBC | Sell | $\$ 16.10$ | 600 | $\$ 9,660$ | $\$ 108$ | $\$ 22,732.43$ | $\$ 2,822.03$ |
| 25/Oct | SUNW | Sell | $\$ 5.22$ | 2000 | $\$ 10,440$ | $\$ 100$ | $\$ 33,172.43$ | $\$ 2,922.03$ |
| 26/Oct | BAP | Buy | $\$ 42.92$ | 200 | $(\$ 8,584)$ |  | $\$ 24,588.43$ |  |
| 26/Oct | BDK | Sell | $\$ 85.25$ | 120 | $\$ 10,230$ | $\$ 224.4$ | $\$ 34,818.43$ | $\$ 3,146.43$ |

Table 3.5.5 Nick Week 5

Acergy (ACGY): Acergy began trading Monday at a much lower price than previous weeks. Expecting this to be a short-lived downturn in ACGY stock, I bought 400 shares at $\$ 17.41$ expecting it to rise substantially in the coming days. My assumption was correct as ACGY opened Tuesday at over $\$ 18.00$. When trading volume began to slow and the price started to level mid-day I decided to sell my 400 shares and take a quick one-day profit. I made $\$ 336.00$ on this trade.


Figure 3.5.19 Acergy Week 5

Center Bancorp (CNBC): I employed a similar strategy as ACGY stock with Center Bancorp. Although the stock opened at a relatively decent price, there was a quick downturn. However, CNBC is not a very volatile stock and tends to remain within a $\$ 0.30$ price interval. I used this to my advantage when buying in for 600 shares at $\$ 15.92$; I knew any gain on this stock would place me between $\$ 0.10$ and $\$ 0.20$ per share. I sold Tuesday when the shares were back to a price level with more relative strength and less volatility than Monday's trading session saw. I sold my shares for $\$ 16.10$ and made a $\$ 108.00$ profit.

Black \& Decker (BDK): Black \& Decker saw stagnant trading throughout Monday and Tuesday. Investors were not showing much interest in the stock as it hovered around $\$ 83.50$. I bought in Tuesday afternoon for $\$ 83.38$ per share. At this point I figured the stock was undervalued and would see an eventual upward trend. Wednesday began much lower than previous days - not wanting to immediately pull out of the investment and take a loss, I waited this one out and saw the stock rise over the course of Thursday and Friday. I sold at $\$ 85.25$ on Friday after an immense run Thursday and a continued growth phase Friday afternoon. I profited $\$ 224.40$ on this trade.


Figure 3.5.20 Center Bancorp Week 5


Figure 3.5.21 Black \& Decker Week 5

Sun Microsystems (SUNW): There was a slowly decreasing trend beginning Monday and continuing into Tuesday. I bought 2000 shares at $\$ 5.17$ - this was well below previous weekly highs. There was a moderate run over Wednesday; I got out of the stock too early. I sold at $\$ 5.22$ when I thought it was going to stagnate or go back down in the afternoon trading hours. It turns out that the stock climbed to astronomical levels Friday - growing to nearly $\$ 5.60$. However, I made a gain of $\$ 100.00$ on Sun for the week.


Figure 3.5.22 Sun Microsystems Week 5

Cisco Systems Inc. (CSCO): After a two-day slump I bought into Cisco Wednesday expecting an upturn in stock price. However, I was wrong as the price fell slowly throughout the remainder of the week. I purchased 400 shares at $\$ 24.36$ - I held onto them. We will see what week 6 brings.


Figure 3.5.23 Cisco Systems Week 5

Delta Petroleum (DPTR): I bought into DPTR Thursday afternoon at $\$ 26.34$ on what looked to be a strong afternoon run. After lunch the stock took a sharp downturn and fell over $\$ 0.50$. I expect the stock to start off this week slowly but with a moderate price increase. I will look to sell after any sharp gains where the stock climbs $\$ 0.20$ within several hours.


Figure 3.5.24 Delta Petroleum Week 5

Credicorp Ltd. (BAP): BAP saw highs above $\$ 43.50$ during Monday and Thursday. I purchased 200 shares Friday at $\$ 42.92$ - I expect this stock to open above $\$ 43.00$ Monday and reclaim some of its Week 5 highs.


Figure 3.5.25 Credicorp Ltd. Week 5

## Week 6

| Date | Symbol | Action | Price | Shares | Cost | Profit | Total Cash | Accum. Gain |
| :--- | :---: | :---: | :--- | :--- | :--- | :--- | :--- | ---: |
| 30/Oct | ACGY | Buy | $\$ 18.02$ | 600 | $(\$ 10,812)$ |  | $\$ 24,006.43$ |  |
| 30/Oct | DPTR | Buy | $\$ 25.71$ | 400 | $(\$ 10,284)$ |  | $\$ 13,722.43$ |  |
| 30/Oct | ACGY | Sell | $\$ 18.22$ | 600 | $\$ 10,932$ | $\$ 120$ | $\$ 24,654.43$ | $\$ 3,266.43$ |
| 1/Nov | BAP | Sell | $\$ 43.60$ | 200 | $\$ 8,720$ | $\$ 136$ | $\$ 33,374.43$ | $\$ 3,402.43$ |
| 1/Nov | CSCO | Sell | $\$ 24.40$ | 400 | $\$ 9,760$ | $\$ 16$ | $\$ 43,134.43$ | $\$ 3,418.43$ |
| 2/Nov | SUNW | Buy | $\$ 5.31$ | 2000 | $(\$ 10,620)$ |  | $\$ 32,514.43$ |  |
| 2/Nov | TM | Buy | $\$ 117.55$ | 80 | $(\$ 9,404)$ |  | $\$ 23,110.43$ |  |
| 2/Nov | TM | Sell | $\$ 118.37$ | 80 | $\$ 9,469.6$ | $\$ 65.6$ | $\$ 32,580.03$ | $\$ 3,484.03$ |
| 3/Nov | CSCO | Buy | $\$ 23.80$ | 400 | $(\$ 9,520)$ |  | $\$ 23,060.03$ |  |
| 3/Nov | DPTR | Sell | $\$ 26.33$ | 400 | $\$ 10,532$ | $\$ 248$ | $\$ 33,592.03$ | $\$ 3,732.03$ |

Table 3.5.6 Nick Week 6

Acergy (ACGY): Acergy took a big hit Monday morning and by noon had fallen below \$18.00; I purchased during this downturn knowing that a momentary upward trend was in the very near future. I bought 200 shares at $\$ 18.02$ and later sold at $\$ 18.22$. Throughout Monday and Tuesday, ACGY took interestingly similar trend patterns where there was an initial surge in stock price followed by a massive downward fall, only to bounce back at a level more relevant to the opening price - I made $\$ 120.00$ on this trade.


Figure 3.5.26 Acergy Week 6

Delta Petroleum (DPTR): I bought 400 shares of DPTR at $\$ 25.71$ during what was a continual afternoon downward trend. The stock continued to drop until just after noon on Tuesday when there was a sharp increase above Monday's opening price. However, this rise was offset Wednesday when DPTR dropped below $\$ 24.50$, which is one of the lowest price levels in the last several weeks. DPTR took almost a symmetric upturn to its 2.5 day decline as it began a strong rise from noon on Wednesday. I sold on Friday when the stock was vastly outperforming its previous four day span. I sold all 400 shares for $\$ 26.33$ and profited $\$ 248.00$ - this was my largest gain of the week.


Figure 3.5.27 Delta Petroleum Week 6

Cisco Systems Inc (CSCO): I had purchased 400 shares of Cisco stock last week at $\$ 26.36$. After the latter half of last week's downward trend, the stock price began to rise from Monday to Wednesday. I held onto the stock until it was close enough to $\$ 26.36$ so that I wouldn't have a loss. I sold it off for $\$ 26.40$ and profited $\$ 16.00$. I purchased 400 shares at $\$ 23.80$ on Friday - I may be able to make a moderate profit when the stock goes above the $\$ 24.00$ dollar range which I expect it to do during the middle of week 7.


Figure 3.5.28 Cisco Week 6

Credicorp Ltd. (BAP): I purchased 200 shares of Credicorp stock during week 5 when it was below $\$ 43.00$. Trading volume during Monday and Tuesday was extremely low, then once Wednesday came, quickly shifted. I sold my shares after the market closed on Wednesday and BAP was at $\$ 43.60$ - I should have waited until Friday to sell my shares as I would have made several hundred more on my original investment. However, hindsight is $20 / 20$ and it is easy to speculate - I made a solid gain of $\$ 136.00$ on this trade.


Figure 3.5.29 Credicorp Ltd. Week 6

Toyota Motors (TM): Toyota had an erratic week with opening prices varying substantially over the span of Monday through Thursday. Wednesday saw TM open at close to $\$ 19.00$ which was the high for week 6 . I bought Thursday morning when I saw the price drop sharply down to $\$ 117.55$. I expected to sell later in the day when the shares approached the average price over the previous two days. I got out of Toyota in the afternoon for $\$ 118.37$ during what was a conservatively paced upward trend with less volatility than Monday or Tuesday. This trade earned me \$65.60.


Figure 3.5.30 Toyota Motors Week 6

Sun Microsystems (SUNW): Sun Microsystems saw a peak on Monday when it passed \$5.60. I purchased on Thursday during a period of low trading volume for $\$ 5.31$. I expect Sun to rise as much as $\$ 0.20$ in week 7 - however Sun did see lows near $\$ 5.15$ during the previous two weeks and if it looks to be dropping further on Monday I will dump most of these shares.


Figure 3.5.31 Sun Microsystems Week 6

## Week 7

I chose to add four new companies to my portfolio as my current stocks are beginning to see 52 -week highs. The shares do not seem to behave with their normal volatility. I can introduce some fluctuation to trading methods and wait for my original stocks to reach a period where there is less stagnation. I will still be trading within my original pool of six companies, but not at the frequency experienced in previous weeks.

Cephalon (CEPH): was launched in 1987 by an enthusiastic young researcher, Dr. Frank Baldino, Jr., Cephalon's growth has led to discoveries and new therapies for sleep disorders, neurological diseases, cancer, pain management and addiction. The company's early focus on neurodegenerative disease led to breakthroughs in understanding the chemistry of what causes cells to die, insights that are now being applied to treating cancer as well as diseases of the central nervous system. At the same time, the company explored unmet patient needs in sleep medicine, becoming the market leader in treating wakefulness and developing the only FDA approved treatment for shift-work sleep disorder [9].


Figure 3.5.32 Cephalon stock prices over the last three months

Goodrich Petroleum (GDP) is an independent oil and gas company engaged in the exploration, exploitation, development and production of oil and natural gas properties primarily in the Cotton Valley Trend of East Texas and Northwest Louisiana and in the transition zone of South Louisiana. The Company owns working interests in 139 active oil and gas wells located in 19 fields in three states [10].


Figure 3.5.33 Goodrich Petroleum stock prices over the last three months

EMC Insurance (EMCI) is built on more than 90 years of serving policyholders and independent insurance agents. Today, EMC has grown to become one of the largest property and casualty companies in Iowa with more than 2,300 employees and assets exceeding $\$ 2$ billion. Nationally, EMC ranks among the top 60 insurance organizations [11].


Figure 3.5.34 EMCI Insurance stock prices over the last three months

Bradley Pharmaceuticals Inc (BDY) is a specialty pharmaceutical company that provides therapies to niche physician specialties in the U.S. and 38 international markets. The Company's Doak Dermatologics subsidiary delivers dermatology and podiatry therapies, while the Kenwood Therapeutics division provides gastroenterology and internal medicine brands [12].


Figure 3.5.35 Bradley Pharmaceuticals stock prices over the last three months

| Date | Symbol | Action | Price | Shares | Cost | Profit | Total Cash | Accum. <br> Gain |
| :--- | :---: | :---: | :--- | ---: | ---: | ---: | ---: | :--- |
| 6/Nov | CSCO | Sell | $\$ 24.68$ | 400 | $\$ 9,872$ | $\$ 352$ | $\$ 43,464.03$ | $\$ 4,084.03$ |
| 6/Nov | SUNW | Sell | $\$ 5.31$ | 2000 | $\$ 10,620$ | $\$ 0$ | $\$ 54,084.03$ | $\$ 4,084.03$ |
| 7/Nov | CNBC | Buy | $\$ 15.86$ | 800 | $(\$ 12,688)$ |  | $\$ 41,396.03$ |  |
| 8/Nov | BDY | Buy | $\$ 18.04$ | 600 | $(\$ 10,824)$ |  | $\$ 30,572.03$ |  |
| 8/Nov | EMCI | Buy | $\$ 30.44$ | 300 | $(\$ 9,132)$ |  | $\$ 21,440.03$ |  |
| 9/Nov | CNBC | Sell | $\$ 15.99$ | 800 | $\$ 12,792$ | $\$ 104$ | $\$ 34,232.03$ | $\$ 4,188.03$ |
| 9/Nov | EMCI | Sell | $\$ 30.57$ | 300 | $\$ 9,171$ | $\$ 39$ | $\$ 43,403.03$ | $\$ 4,227.03$ |
| 10/Nov | GDP | Buy | $\$ 40.99$ | 300 | $(\$ 12,297)$ |  | $\$ 31,106.03$ |  |
| 10/Nov | BDY | Sell | $\$ 18.43$ | 600 | $\$ 11,058$ | $\$ 234$ | $\$ 42,164.03$ | $\$ 4,461.03$ |

Table 3.5.7 Nick Week 7

Cisco Systems Inc (CSCO): I bought into Cisco on Friday after the stock had taken a downward turn over the previous three days. I bought 400 shares at $\$ 23.80$ and expected a growth above $\$ 24.00$ by at least Tuesday the $7^{\text {th }}$. By Monday afternoon, CSCO had grown to levels above $\$ 24.50$ and I was forced to sell at $\$ 24.68$ which earned me $\$ 352.00$ total. Had I waited until Thursday to sell, my profits would be well over $\$ 1000.00$.


Figure 3.5.36 Cisco Systems Week 7

Sun Microsystems (SUNW): I bought Sun stock last week at $\$ 5.31$ per share; I purchased 2000 shares during a strong downward trend. I pulled out extremely early Monday after being afraid of losing in the afternoon. I thought the stock was going to mirror its morning rise with an afternoon decrease in price. However, I was wrong and remained level on this transaction as I sold for $\$ 5.31$. I need to learn to be more patient with my stocks, I may have seen a several hundred dollar profit had I waited a mere 24 hours.


Figure 3.5.37 Sun Microsystems Week 7

Center Bancorp (CNBC): I went into CNBC on Tuesday after a moderately strong downward trend that lasted nearly all day. I bought 800 shares at $\$ 15.86$ per share; I sold on Thursday after a midweek rebound in price. I left CNBC at $\$ 15.99$ and profited $\$ 104.00$ for the week on this stock.


Figure 3.5.38 Center Bancorp Week 7

Bradley Pharmaceuticals (BDY): One of my four new stocks, BDY looked to be gradually growing from Monday to Wednesday. After gaining some confidence in the stock's activity, I bought 600 shares Wednesday at $\$ 18.04$. After a strong upturn Friday, I sold upon the closure of the markets for the weekend at $\$ 18.43$ and profited $\$ 234.00$ on my transaction.

EMC Insurance (EMCI): I bought into EMCI on Wednesday expecting the stock to reach levels seen Monday afternoon and midday Tuesday. I went in with 300 shares at $\$ 30.44$; the stock began Thursday with a poor downward opening and I sold after the first surge in price. I got out of this stock for $\$ 30.59$ per share and profited $\$ 39.00$.


Figure 3.5.39 Bradley Pharmaceuticals Week 7


Figure 3.5.40 EMC Insurance Week 7

Goodrich Petroleum (GDP): I bought into Goodrich Petroleum after the markets closed on Friday. I went in at $\$ 40.99$ with a purchase of 300 shares. If the stock reaches the peaks of Wednesday or Thursday I will be in for a very strong profit. I hope to see a gain of this caliber in week 8 .


Figure 3.5.41 Goodrich Petroleum Week 7

## Week 8

Upon hearing news that Wal-Mart surpassed its third quarter sales projection by $11 \%$, I decided to buy shares in the super power. Previous highs are nearly $\$ 10$ above current trends. Hopefully, the shares will achieve a value that reflects the strong Q3 performance.


Figure 3.5.42 Wal-Mart stock prices over the past three months

| Date | Symbol | Action | Price | Shares | Cost | Profit | Total Cash | Accum. Gain |
| :--- | :---: | :---: | :--- | :---: | :---: | ---: | :--- | :--- |
| $13 /$ Nov | ACGY | Buy | $\$ 19.85$ | 500 | $(\$ 9,925)$ |  | $\$ 32,239.03$ |  |
| 13/Nov | SUNW | Buy | $\$ 5.38$ | 2000 | $(\$ 10,760)$ |  | $\$ 21,479.03$ |  |
| 14/Nov | WMT | Buy | $\$ 47.66$ | 200 | $(\$ 9,532)$ |  | $\$ 11,947.03$ |  |
| 14/Nov | ACGY | Sell | $\$ 19.94$ | 500 | $\$ 9,970$ | $\$ 45$ | $\$ 21,917.03$ | $\$ 4,506.03$ |
| $14 /$ Nov | SUNW | Sell | $\$ 5.38$ | 2000 | $\$ 10,760$ | $\$ 0$ | $\$ 32,677.03$ | $\$ 4,506.03$ |
| 15/Nov | GDP | Sell | $\$ 41.65$ | 300 | $\$ 12,495$ | $\$ 198$ | $\$ 45,172.03$ | $\$ 4,704.03$ |
| $16 /$ Nov | ACGY | Buy | $\$ 19.20$ | 500 | $(\$ 9,600)$ |  | $\$ 35,572.03$ |  |
| $16 /$ Nov | GDP | Buy | $\$ 39.33$ | 300 | $(\$ 11,799)$ |  | $\$ 23,773.03$ |  |
| $16 /$ Nov | ACGY | Sell | $\$ 19.51$ | 500 | $\$ 9,755$ | $\$ 155$ | $\$ 33,528.03$ | $\$ 4,859.03$ |

Table 3.5.8 Nick Week 8

Acergy (ACGY): I bought shares of Acergy stock Monday afternoon during what seemed to be a moderate run. The previous weekly highs of over $\$ 20$ motivated my decision. I figure this would be a quick, sub $\$ 100$ profit when the shares were sold. I sold on Tuesday when the shares were at $\$ 19.94$ during what was an opening decline. My assumptions were right in the long run with ACGY reaching levels over $\$ 20.20$ on Thursday. This would have been a $\$ 200+$ profit had I stuck with the stock. I profited $\$ 45.00$ on this trade. ACGY opened Friday morning with a very low start. I jumped on this opportunity and quickly purchased 500 shares at $\$ 19.20$ to see the stock grow to $\$ 19.51$ by close. I made $\$ 155.00$ on this trade.

Sun Microsystems (SUNW): Again I was tricked into buying a stock during a Monday afternoon run. I purchased 2000 shares at $\$ 5.38$ and expected the overall strong trend on Monday to spread into at least Wednesday. However, I was wrong and the stock fluctuated all of Tuesday. I chose to sell at $\$ 5.38$ Tuesday afternoon when the stock appeared to be taking a turn for the worst around $2: 00 \mathrm{pm}$. I came out even on this trade.


Figure 3.5.43 Acergy Week 8


Figure 3.5.44 Sun Microsystems Week 8

Wal-Mart Stores (WMT): Wal-Mart has seen a strong decline in the past few weeks. The stock price has fallen close to $\$ 10.00$. However, there was great news for investors during week 8 when Wal-Mart announced an $11 \%$ increase in third-quarter sales. This was the single motivating factor in my decision to purchase 200 shares at $\$ 47.66$. Previous weekly highs are over $\$ 55.00$ and this investment could turn into a profit in the thousands within the next two weeks.


Figure 3.5.45 Wal-Mart Stores Week 8

Goodrich Petroleum (GDP): During week 7, I made a purchase of 300 shares of Goodrich Petroleum stock at $\$ 40.99$. Like a fool, I neglected to look at the stock prices on Wednesday and missed out on a $\$ 300+$ profit. I sold GDP on Thursday at $\$ 41.65$ to earn $\$ 198.00$ on this trade. I bought back into GDP Friday for $\$ 39.33$ - I should see a tremendous profit on this investment by Tuesday of week 9 .


Figure 3.5.46 Goodrich Petroleum Week 8

## Week 9

| Date | Symbol | Action | Price | Shares | Cost | Profit | Total Cash | Accum. <br> Gain |
| :--- | :---: | :---: | :---: | :---: | :---: | ---: | ---: | :--- |
| 20/Nov | TM | Buy | 119.15 | 100 | $(\$ 11,915)$ |  | $\$ 21,613.03$ |  |
| 20/Nov | GDP | Sell | 40.05 | 300 | $\$ 12,015$ | 4216 | $\$ 33,628.03$ | $\$ 5,075.03$ |
| 22/Nov | GDP | Buy | 40 | 980 | $(\$ 39,200)$ |  | $\$ 5,571.97$ |  |
| 22/Nov | GDP | Sell | 40.42 | 980 | $\$ 39,611.6$ | $\$ 411.6$ | $\$ 34,039.63$ | $\$ 5,486.63$ |
| 22/Nov | TM | Sell | 119.69 | 100 | $\$ 11,969$ | $\$ 54$ | $\$ 46,008.63$ | $\$ 5,540.63$ |
| 22/Nov | WMT | Sell | 47.99 | 200 | $\$ 9,598$ | $\$ 66$ | $\$ 55,606.63$ | $\$ 5,606.63$ |

Table 3.5.9 Nick Week 8

Wal-Mart Stores (WMT): As I stated during week 8, I was planning to add Wal-Mart to my portfolio after the announcement of a growth in Q3 sales. I figured that this would trigger at least a moderate run with profits of $\$ 2.00$ or more on each share. However, this was not the case and Wal-Mart stayed within its normal spread, hovering around the $\$ 47.00$ price range. I bought shares in week 8 for $\$ 47.66$ and sold this week at $\$ 47.99$. This earned me $\$ 66.00$.


Figure 3.5.47 Wal-Mart Week 9

Goodrich Petroleum (GDP): I bought Goodrich shares during week 8 at a discount compared to the average prices seen over the last several weeks. I bought 300 shares at $\$ 39.33$ and sold on Monday after a run for $\$ 40.05$; this earned me $\$ 172.00$. I decided to try something new on Wednesday with GDP stock; I decided to buy in high volume. I purchased 980 shares at $\$ 40.00$ and monitored GDP for all of Wednesday. At one point I was up $\$ 720.00$, but got greedy and waited some more as I thought the growth would continue over the last hour of trading. However, there was a steep fall and I sold my shares on Friday for $\$ 40.42$ and profited $\$ 411.60$.


Figure 3.5.48 Goodrich Petroleum Week 9

Toyota Motors (TM): I haven't purchased Toyota stock in a while and figured that I could earn a quick profit when I bought 100 undervalued shares at $\$ 119.15$ on Monday. I turned around and sold them for $\$ 119.69$ on Wednesday, earning me a $\$ 54.00$ profit.


Figure 3.5.49 Toyota Motors Week 9

## Week 10

| Date | Symbol | Action | Price | Shares | Cost | Profit | Total Cash | Accum. <br> Gain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27/Nov | BAP | Buy | $\$ 41.11$ | 200 | $(\$ 8,222)$ |  | $\$ 47,384.63$ |  |
| 27/Nov | CNBC | Buy | $\$ 15.93$ | 1000 | $(\$ 15,930)$ |  | $\$ 31,454.63$ |  |
| 27/Nov | CNBC | Sell | $\$ 16.04$ | 1000 | $\$ 16,040$ | $\$ 110$ | $\$ 47,494.63$ | $\$ 5,716.63$ |
| 1/Dec | ACGY | Buy | $\$ 19.70$ | 1200 | $(\$ 23,640)$ |  | $\$ 23,854.63$ |  |
| 1/Dec | SUNW | Buy | $\$ 5.42$ | 2000 | $(\$ 10,840)$ |  | $\$ 13,014.63$ |  |
| 1/Dec | ACGY | Sell | $\$ 19.70$ | 1200 | $\$ 23,640$ | $\$ 0$ | $\$ 36,654.63$ | $\$ 5,716.63$ |
| 1/Dec | BAP | Sell | $\$ 39.95$ | 200 | $\$ 7,990$ | $(\$ 232)$ | $\$ 44,644.63$ | $\$ 5,484.63$ |
| 1/Dec | SUNW | Sell | $\$ 5.39$ | 2000 | $\$ 10,780$ | $(\$ 60)$ | $\$ 55,424.63$ | $\$ 5,424.63$ |

Table 3.5.10 Nick Week 10

Credicorp Ltd. (BAP): I bought 200 shares of BAP before the trading week began at $\$ 41.11$. What has been a consistent downward trend lasted longer than I expected. I thought that by midweek there would be a positive upturn, but it did not begin until late Thursday and into Friday. The stock fell well below expectations on Wednesday after a stronger than average opening. I sold my shares for $\$ 39.95$ midway through Friday's trading session. I lost $\$ 232.00$ on this trade.


Figure 3.5.50 Credicorp Ltd. Week 10

Center Bancorp (CNBC): I bought 1000 shares of Center Bancorp stock prior to the market's opening on Monday for $\$ 15.93$. After trading began with CNBC stock, I sold off at $\$ 16.04$ for a $\$ 110.00$ profit.


Figure 3.5.51 Center Bancorp Week 10

Sun Microsystems (SUNW): I bought 2000 shares of Sun on Friday after figuring it would climb and mirror Monday's fall with a week-ending surge. However, I was wrong and lost $\$ 0.03$ on each share and $\$ 60.00$ overall.


Figure 3.5.52 Sun Microsystems Week 10

Acergy (ACGY): I bought 1200 shares of Acergy stock on Friday at $\$ 19.70$; this wasn't a risky maneuver as the stock had already taken a dive earlier in the day, as it had on Tuesday, Wednesday, and Thursday. The stock's activity slowed in the afternoon hours and I sold for $\$ 19.70$. There was no profit or loss with this transaction.


Figure 3.5.53 Acergy Week 10

Assuming brokerage fees of $\$ 10.00$ per trade, Weeks 3-10 included 88 trades and accounted for $\$ 880.00$. My profit for the entire trading session after fees was $\$ 4,544.53$, which is a $9.08096 \%$ gain. If I were to continue trading with this consistency, technical trading would become a useful tool to increase my savings and assure a higher rate of return than many average traders.

## 4. Swing Trading

### 4.1 Swing Trading Theory:

Swing trading began with George Taylor's "The Taylor Trading Technique", which was published in the 1950s. This method is a 3-day cycle with each day being an opportunity to "buy", "sell", or "sell short". The essence of this method is to buy at support and sell at resistance or simply put, buy at relatively low risk and sale when the stock is very volatile and high risk. Modern trading expands on this concept to locate the swing in many other ways.

Nowadays, swing trading builds on several strategies to maximize its effectiveness. The trader must stand apart from the crowd and find a way to sift through all the noise. In this madness and chaos, he must also remember to spend time controlling the losses as oppose to looking for ways to find gains. Thus, swing trading requires an enormous amount of discipline over ones emotions.


Figure 4.1.1 Example of stock volatility

As seen in the chart above, a particular stock will have swings between broadly defined extremes. A trader may hold on to a particular stock for up to three days or even up to three weeks if the stock continues its trend and then sell as the stock begins to fall. Because of the characteristic of swing trading, large-cap stocks that are very actively traded are the best candidates. Additionally, research on historical data has shown that liquid stocks tend to not follow the baseline value when the market is best for swing trading. An example is shown below on an exponential moving average chart, EMA.


Figure 4.1.2 10 week EMA illustrating market condition

Correct identification of what type of market is currently being experienced can make the difference between a successful and an unsuccessful trade. Therefore, the remainder of this portion on Swing Trading will discuss the 7-Bells, which is a technique that "capitalizes on highly predictable crowd behavior through the application of classic Pattern Cycle techniques."(257) This technique identifies signals that will help locate a profitable opportunity. The bells signal different things in the market. One bell may signal an exit point while another may signal the start of a swing movement.

Dip Trip: During a strong rally, many investors will be waiting to pullback. Under the right conditions, a swing trader can use this to his advantage by buying the pullbacks within a tick or two of the major reversal. These sell offs are low-risk buying opportunities; however, it is hard to tell how long the trend will keep falling. Because of this risk factor, one must be defensive and take any profit that the offer will offer. Markets have a tendency to pull back at the same angle that they previously rose at. This makes it easy, visually, to spot these chances. The dip will usually sharply change direction and reach a new high. Strong stocks that fall when volume is low into a solid support represent the best positions to execute. Dip trips display the common trait of not violating any important Support/Resistant levels.


Figure 4.1.3 caption Example of Dip Trip

Coiled spring: It is said that $80 \%$ of the trading will occur in $20 \%$ of the time. Stocks usually have cycles of activity in which buyers will furiously sway the price one direction or another, after which, the market will correct the stock and activity is relatively calm. These calm in the cycles usually mark a point at which the stock will either jump to a
new high or fall to a new low. A coiled spring storing ever greater potential energy only requires a fraction of a second release all this energy. A swing trader must recognize this signal and act on it before the rest of the crowd to secure a profit.


Figure 4.1.4 Example of Coiled Spring

Finger Finder: The Japanese candlestick charting techniques are becoming more and more popular amongst traders. The finger finder applies a method to look at individual price action for short-term market signals. Classical bars have trouble identifying important signals in the charting landscape because of modern market noise. The unique shadow and real body structure of candlesticks help reduce the whipsaw. Candles reduce this whipsaw with their unique shadow and real body structure. One must look for fingers that reach across well-defined Support/Resistance area and jump across violation points because they generally signal price swings in the opposite direction.


Figure 4.1.5 Example of Finger Finder

Hole-In-The-Wall: This signal acknowledges the fact that crowds usually stick around long after the real move ends and a rally has died down. As a stock's volatility falls, there will usually be a new impulse in the opposite direction. Active trends rarely flip over quickly. But once in a while, sudden events can cause the new trend to start in a single bar. The greedy crowd will drive the rally higher and higher until they eventually run away from the stock and the market falls on its own weight. The signal to watch for is a new intermediate high in an uptrend followed stock gaps. The volume will decline faster than the last rally's impulse and this will start a new downtrend.


Figure 4.1.6 Example of Hole-In-The-Wall

Power-Spike: Participation in a market will change in outstanding volatility, float and external events. These changes can trigger a sharp development in the price because it may increase buying and selling. Once a stock crosses a certain new high or new low, a change in the charting landscape may occur as volume jumps above the market's normal level. These spikes in volume create an excellent short-term opportunity. A study of the price action with the volume event to filter out unnecessary patterns will help eliminate market noise. Signs in charting landscape will show a possible reversal, breakout, breakdown, or swing pivot.


Figure 4.1.7 Example of Power-Spike

Bear Hug: Swing trader will require greater precision to decide on short sales as oppose to long entries; however, rallies and sell offs work differently and therefore, harder to predict. Demand and strong volume will lift a stock, but they can just as easily fall for long periods under the right conditions. There may be little warning of violent market sell offs ending and stocks that break support sometimes do not fall. A seasoned swing trader must know exactly where uniformed investors will try to short stocks. They will take advantage of buying pressure by triggering short squeezes. One must try to stay flat into a squeeze and sell at the top of the rally just before everyone else gives up. This will require patience and a lot of experience to tell the tick before the stock will sudden reverse from uninformed investor actions.


Figure 4.1.8 Example of Bear Hug
$\mathbf{3}^{\text {rd }}$ Watch: This pattern looks like a rounded cup with a small handle. This signals a breakout though a triple top. The price will rally to a high and then fail. It will then calm down and build a sideways base after which a new really will send it to the old high. Investors will sell at the double top and the stock will pull back. After all of these signs, the stock will sharply break out to a new high.

### 4.2 Criteria for Selecting Companies:

I chose to limit trading to only stocks in the technology sector of the market. This is because stocks in those areas exhibit a tendency for volatility. Swing trading capitalizes on the short-term opportunities; therefore, a stock must have lots of pricing actions for this session to be profitable. A stable stock is not a good choice because there isn't


Figure 4.1.9 Example of $3^{\text {rd }}$ Watch
enough action from day to day to offset the amount of money paid for the commissions associated with trading. The two criteria for selecting a company are: 1) the company must be well-known. Their brand must be popular enough that anyone knowledgeable of technology would know of them. 2) The stock prices must be above $\$ 15$. This criterion is set in place to weed out weaker stocks that may seem tempting to invest in but are far too risky to invest in.

### 4.3 Companies Selected:

Microsoft (MSFT): Microsoft has a current volume of 856,143. Although, it exhibits the volatility of a technology stock it has grown to become quite a solid stock. Its relative price change and consistency is very high and it previously closed above its 50-day moving average. As stated previously, stocks that are performing above or below its EMA represents a great pick for swing traders. Microsoft was also picked because of its
risk factor. Although it is volatile at times, Microsoft has proven itself as a very solid performer.


Figure 4.3.1 Microsoft stock prices over the past year

Intel (INTC): Intel is a leader in the microprocessor business. Its only competition is AMD, which it seems to currently have a lead on due to the release of the new Intel Duo Core processors. The cheaper and faster processors have quickly pushed AMD's more expensive processors off the shelves and forced AMD to lower prices of their processors. The introduction of this news will most likely send investors flocking to this stock. The sudden increase in volume may result in a power spike that may fall drastically or continue. Nonetheless, Intel represents a great short-term opportunity.


Figure 4.3.2 Intel stock prices over the past year

### 4.4 Transactions

## Week 1

| Date | Symbol | Action | Price | Shares | Net Cost/ | Profit/ | Total Cash | Accum. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1012 |  |  |  |  |  |  | \$50,000.00 |  |
|  | INTC | Buy | \$20.57 | 1000 | (\$20,570.00) |  | \$29,430.00 |  |
|  | MSFT | Buy | \$27.32 | 1000 | (\$27,320.00) |  | \$2,110.00 |  |
| $10 \backslash 4$ |  |  |  |  |  |  |  |  |
|  | INTC | Sell | 20.82 | 1000 | \$20,820.00 | \$250.00 | \$22,930.00 | \$250.00 |
|  | MSFT | Sell | 27.92 | 1000 | \$27,920.00 | \$600.00 | \$50,850.00 | \$850.00 |
| 1016 |  |  |  |  |  |  |  |  |
|  | INTC | Buy | 20.63 | 1000 | (\$20,630.00) |  | \$30,220.00 |  |

## Table 4.4.1 Week 1 - Vannak

Intel (INTC): I bought Intel at $\$ 20.57$. Figure 4.4 .1 shows the 3 month chart of Intel up to this week. As one can observe, there are several instances where the stocks will be at relatively the same price and this signals a sudden fall or rise of the price. Since the price for this week seems to have hit its resistance, it would be more natural for the price to fall slightly. Therefore, Intel was sold at $\$ 20.82$. This resulted in a $\$ 250$ profit.

Later that week, I reconsidered Intel. The signal may have also suggested the stock will rise. Therefore, I began to look for buy signals when it dropped below $\$ 20.82$. This occurred on the $6^{\text {th }}$, when the price closed at $\$ 20.63$.


Figure 4.4.1 Intel Week 1

Microsoft (MSFT): Microsoft seems to move sideways for awhile and then will have a sudden jump in price. Therefore, I decided to try and decipher the signals within the sideway trend. I purchased Microsoft at $\$ 27.32$ because it seemed like it would continue to be around that price for a bit. When I sold Intel, I noticed a weak sell signal and decided to take the profit and sell for a profit of $\$ 600.00$.


Figure 4.4.2 Microsoft week 1

## Week 2

I decided to change the chart type for this week. The candlesticks will help show the Finger Hammer signal, which was discussed earlier, more clearly. After switching charts, I noticed the hammer and decided to buy since it was the beginning of this new sideways trend.

I decided not to purchase Intel again because there chart showed a power-spike. The price of Intel will fall within the next few bars so I will wait until it drops and then there is a signal that it will rise again to buy.


Figure 4.4.3 Microsoft Week 2


Figure 4.4.4 Intel Week 2

## Week 3

| Date | Symbol | Action | Price | Shares | Net Cost/ <br> Proceeds | Profit/ |  | Accum. Gain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Loss | Total Cash |  |
| 10\16 |  |  |  |  |  |  |  |  |
|  | INTC | Sell | 21.93 | 1000 | \$21,930.00 | \$1,300.00 | \$24,690.00 | \$2,150.00 |
| $10 \backslash 18$ |  |  |  |  |  |  |  |  |
|  | MSFT | Sell | 28.52 | 1000 | \$28,520.00 | \$1,060.00 | \$53,210.00 | \$3,210.00 |
| $10 \backslash 17$ |  |  |  |  |  |  |  |  |
|  | INTC | Buy | 20.9 | 1000 | (\$20,900.00) |  | \$32,310.00 |  |
| $10 \backslash 19$ |  |  |  |  |  |  |  |  |
|  | INTC | Buy | 21.03 | 1000 | (\$21,030.00) |  | \$11,280.00 |  |

Table 4.4.3 Week 3 - Vannak

Intel (INTC): I noticed a strong sell signal this week and sold Intel for $\$ 21.93$. This resulted in a $\$ 1,300.00$ profit. Later in the week, I noticed a signal that suggests a long sideway trend will begin so I decided to buy Intel again at $\$ 20.90$. Additionally, since Intel is cheaper per share and is more volatile than Microsoft, I decided to buy Intel again and wait to buy Microsoft at a later time. The returns per share on Intel and the fact that I could buy more stocks in Intel made me decide that I should focus on Intel.

Microsoft (MSFT): I had already decided to commit my capital into Intel and the rest of the week, I spent looking for sell signals for Microsoft. This occurred late in the week but there was finally a signal to sell. I sold Microsoft for $\$ 28.52$ and made a $\$ 1,060.00$ profit on the trade. This would suggest that the return on either stock may be more similar than I had earlier anticipated. Therefore, I will wait until next week's transaction to decide whether I should buy Microsoft again.


Figure 4.4.5 Intel Week 3


Figure 4.4.6 Microsoft Week 3

## Week 4

| Date |
| :---: |
| Symbo |
| I |

10/26

Table 4.4.4 Week 4 - Vannak


Figure 4.4.7 Intel Week 4

Intel (INTC): There were strong signals of a change in trend this week. I managed to sell Intel at $\$ 21.77$. Since I bought shares of stock in Intel at different times, I made different profits. The total profit for this week was $\$ 1610.00$. I compared this with last week's $\$ 2360.00$ profit and have decided to look for a signal to restart trading Microsoft.

## Week 5

| Date | Symbol | Action | Price | Shares | Net Cost/ <br> Proceeds | Profit/ Loss | Total Cash | Accum. Gain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | \$54,820.00 | \$4,820.00 |
| 10/30 |  |  |  |  |  |  |  |  |
|  | MSFT | Buy | \$28.35 | 1000 | (\$28,350.00) |  | \$26,470.00 |  |
|  | INTC | Buy | \$21.07 | 1000 | (\$21,070.00) |  | \$5,400.00 |  |
| 10/31 |  |  |  |  |  |  |  |  |
|  | MSFT | Sell | \$28.71 | 1000 | \$28,710.00 | \$360.00 | \$34,110.00 | \$5,180.00 |
|  | MSFT | Buy | \$28.62 | 1000 | (\$28,620.00) |  | \$5,490.00 |  |
| 11/1 |  |  |  |  |  |  |  |  |
|  | MSFT | Sell | \$28.88 | 1000 | \$28,880.00 | \$260.00 | \$34,370.00 | \$5,440.00 |
|  | INTC | Sell | \$21.35 | 1000 | \$21,350.00 | \$280.00 | \$55,720.00 | \$5,720.00 |
| 11/2 |  |  |  |  |  |  |  |  |
|  | MSFT | Buy | \$28.68 | 1000 | (\$28,680.00) |  | \$27,040.00 |  |
|  | INTC | Buy | \$20.66 | 1000 | (\$20,660.00) |  | \$6,380.00 |  |
| 11/3 |  |  |  |  |  |  |  |  |
|  | MSFT | Sell | \$28.86 | 1000 | \$28,860.00 | \$180.00 | \$35,240.00 | \$5,900.00 |

Table 4.4.5 Week 5 Vannak

Intel (INTC), Microsoft (MSFT): I began the week by buying both Intel and Microsoft. After holding onto Intel for one day, I decided to sell because of the sideway motion. This usually signals a drop or rise and with the news that the economy isn't doing so well will probably result in the price dropping rather than rising. Therefore, I jumped on the opportunity to sell Intel. This resulted in a profit of $\$ 280.00$. Later in the week, the price of Intel suddenly dropped and there were strong signals to buy it so I purchased it again at $\$ 20.66$.


Figure 4.4.8 Intel Week 5

Switching to yahoo's chart allowed me to notice more trends and signals. This allowed me to buy and sell MSFT several time and seize on early notice of signals. The sell on the $31^{\text {st }}$ was mainly due to the fact that I was able to notice the sell signal early enough to get out before losing too much of my profit. After selling the price continued to drop and I decided to buy it on again on Tuesday. This purchase proved prosperous as it suddenly jumped on Wednesday, which was followed by a long sideways action. I interpreted the sideways action as a sell signal and sold again.


Figure 4.4.9 Microsoft Week 5

## Week 6

|  | Buy/ |  |  |  | Net Cost/ | Profit/ |  | Accum. |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Symbol | Sell | Price | Share | Proceeds | Loss | Total Cash | Gain |
| $11 / 7$ | INTC | Sell | $\$ 21.10$ | 1000 | $\$ 21,100.00$ | $\$ 440.00$ | $\$ 56,340.00$ | $\$ 6,340.00$ |
|  | MSFT | Buy | $\$ 28.77$ | 1000 | $(\$ 28,770.00)$ |  | $\$ 27,570.00$ |  |
|  |  |  |  |  |  |  |  |  |
| $11 / 8$ | INTC | Buy | $\$ 20.53$ | 1000 | $(\$ 20,530.00)$ |  | $\$ 7,040.00$ |  |
|  |  |  |  |  |  |  |  |  |
| $11 / 9$ | INTC | Sell | $\$ 20.89$ | 1000 | $\$ 20,890.00$ | $\$ 360.00$ | $\$ 27,930.00$ | $\$ 6,700.00$ |
|  | MSFT | Sell | $\$ 29.27$ | 1000 | $\$ 29,270.00$ | $\$ 590.00$ | $\$ 57,200.00$ | $\$ 7,290.00$ |
|  |  |  |  |  |  |  |  |  |
| $11 / 10$ | INTC | BUY | $\$ 20.56$ | 1000 | $(\$ 20,560.00)$ |  | $\$ 36,640.00$ |  |

Table 4.4.6 Week 6

Intel (INTC): Intel exhibited several buy and sell signals this week that was able to capitalize on. The power-spike on the $7^{\text {th }}$ allowed me to get out of the stock before it fell. Another spike on the $9^{\text {th }}$ followed by a finger gap signaled a sell on the $9^{\text {th }}$. The stock was bought again on the $10^{\text {th }}$ because it exhibited more stable sideways trend.

Microsoft (MSFT): Microsoft did not exhibit too much action. The only signals were to sell during the $8^{\text {th }}$. Since the stock stabilized at such a high price, I wanted to wait before reinvesting in Microsoft. Maybe in a few days the price will drop back to the $\$ 28$ range.


Figure 4.4.10 Intel Week 6


Figure 4.4.11 MSFT Week 6

## Week 7

|  |  |  |  | Net Cost/ | Profit/ |  | Accum. |  |
| :--- | :--- | :--- | :--- | ---: | :---: | ---: | ---: | ---: | :---: |
| Date | Symbol | Action | Price | Shares | Proceeds | Loss | Total Cash | Gain |
| $11 / 14$ | MSFT | Buy | $\$ 29.21$ | 1000 | $(\$ 29,210.00)$ |  | $\$ 6,030.00$ |  |
|  |  |  |  |  |  |  |  |  |
| $11 / 16$ | INTC | Sell | $\$ 22.33$ | 1000 | $\$ 22,330.00$ | $\$ 1,670.00$ | $\$ 28,360.00$ | $\$ 7,570.00$ |
|  | MSFT | Sell | $\$ 29.48$ | 1000 | $\$ 29,480.00$ | $\$ 270.00$ | $\$ 57,840.00$ | $\$ 7,840.00$ |

Table 4.4.7 Week 7

Intel (INTC): This was a great week for Intel. Its stock had a long upward trend that calmed down on Thursday. This was a great time to sell because it usually drops after calming down. This week's transaction netted $\$ 1670$, which was a lot more than Microsoft. As one can see in figure 4.4.12, the stock calmed on Friday; it will be monitored closely because it will both drop drastically and create an excellent opportunity to buy or it will begin another price jump.


Figure 4.4.12 Intel Week 7


Figure 4.4.13 Microsoft Week 7

Microsoft (MSFT): After a drop in Microsoft prices, I bought shares when it closed on Tuesday. The trend appeared to have changed and I waited for any signals to sell. The signal came on Thursday. There was a short period in which the stock settled and then began to fall. I have noticed that Microsoft generally oscillates between very narrow intervals, which mean that any profit made will not be that great but it's not very risky. I simply waited for the stock price to begin dropping and hold out as long as I can before buying. Then I would sell the stock as soon as it went up a dime or so. If one looks closely, there is a short period in which the price will exhibit a sideways movement and calm down. After this short period the stock will fall.

## Week 8

| Date | Symbol | Action | Price | Shares | Net Cost/ | Profit |  | Accum. |  |
| ---: | :--- | :--- | :--- | ---: | :--- | ---: | :--- | ---: | :---: |
| 20 | MSFT | Buy | $\$ 29.58$ | 1000 | $29,580.00$ |  | $\$ 28,260.00$ |  |  |
|  |  |  |  |  |  |  |  |  |  |
| 22 | MSFT | Sell | $\$ 29.90$ | 1000 | $29,900.00$ | $\$ 690.00$ | $\$ 58,160.00$ | $\$ 8,530.00$ |  |
|  |  |  |  |  |  |  |  |  |  |
| 24 | INTC | Buy | $\$ 21.51$ | 1000 | $(21,510.00)$ |  | $\$ 36,650.00$ |  |  |

Table 4.4.7 Week 8

Intel (INTC): Intel was quite volatile this week. Monday's consistent sideways action with some peaks signaled a fall in the price. This is due in most part to the fact that Intel had reach its resistance at 22.3 and would more likely fall than rise within the next few days. Therefore, there were almost no actions with Intel this week. I felt that purchasing Intel at 22.3 would be a poor choice because it had little room to increase. On Friday, Intel had hit 21.6 and this was an excellent time to buy.


Figure 4.4.14 Intel Week 8

Microsoft (MSFT): Microsoft performed quite well this week. It had a sudden rise during the beginning of the week. Towards the middle of the week on Wednesday, the signal to sell became too strong to ignore and I decided to capitalize on the gains before it could drop back to its usual price.


Figure 4.4.15 Microsoft Week 8

## Week 9

|  |  |  |  |  | Net Cost/ | Profit/ |  | Accum. |
| ---: | :--- | :--- | :--- | ---: | ---: | :---: | ---: | ---: |
| Date | Symbol | Action | Price | Shares | Proceeds | Loss | Total Cash | Gain |
| 28 | MSFT | Buy | $\$ 29.26$ | 1000 | $\$ 29,260.00$ |  | $\$ 7,390.00$ |  |
| 29 | MSFT | Sell | $\$ 29.57$ | 1000 | $\$ 29,570.00$ | $\$ 310.00$ | $\$ 36,960.00$ | $\$ 8,840.00$ |
| 30 | INTC | Sell | $\$ 21.41$ | 1000 | $\$ 21,410.00$ | $(\$ 100.00)$ | $\$ 58,370.00$ | $\$ 8,740.00$ |

Table 4.4.9 Week 9

Intel (INTC): Intel continued to be quite a bad pick this week. Since last week, the price of Intel has actually dropped instead of rise. Therefore, I am cutting my losses as soon as
possible. In the middle of the week, after having dropped for two days, Intel jumped backed up. Even though it did not reach the price at which I bought it at, selling it for a small loss will be much better because it seems that Intel is facing a lot of resistance and may not turn any profit for the next few weeks.


Figure 4.4.16 Intel Week 9

Microsoft (MSFT): Microsoft was much easier to handle as opposed to Intel this week. It is still exhibiting the same patterns. It is swaying between about the same intervals and this makes it a very good choice to put more cash in since it is very predictable. The dropped from Monday's to Tuesday's price followed by the calm sideway action during Tuesday signaled a buy. After the buy, the stock jumped and then stayed at that high for a day. This was the sell point as it has pretty reach the resistance and will only fall shortly.


Figure 4.4.17 Microsoft Week 9

## Week 10

| Date |  | Action | Price | Shares | Net Cost <br> Proceeds | Profit/ |  | Accum. <br> Gain |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Symbol |  |  |  |  | Loss | Total Cash |  |
| 12/7 | MSFT |  |  |  |  |  | \$58,370.00 | \$8,370.00 |

Table 4.4.10 Week 10

Intel (INTC): There was a lost due to Intel last week and that made me weary of purchasing anymore this week until it showed sign of exiting its coiled-spring state. Looking at the chart above of Intel over the course of a few months, reveals that the price climb back up to 22 or even higher soon. However, some may think that the stock is not a good buy and sell it shortly causing the stock to drop. In an effort to reduce the amount lost, I will stay out of Intel this week.

Microsoft (MSFT): I did not purchase any stocks in Microsoft because it became so pricey to purchase. The jump to above 30 was unexpected as it had exceeded its
resistance. However, looking at late November and most of December, there are several signs of it preparing to move up. I was in the habit of purchasing Microsoft at 28 to 29 and selling as soon as it climbed a few cents. Therefore, I did not think buying it was worth it and ended up losing a lot by not seeing the sudden jump.


Figure 4.4.18 Intel Week 10


Figure 4.4.19 Microsoft Week 10

### 4.5 Analysis

Over the course of the 10 week period, I gained $14 \%$ or $\$ 8,370.00$. When compared to investing money in other ventures, the $14 \%$ gain does not seem to be too great considering an initial invest of $\$ 50,000$ had to be made. Assuming that the average WPI graduate makes about $\$ 45,000$ a year, I would not feel safe investing this way. It would take quite some time to save up the capital to invest in the stock market to make just that $\$ 8,370$. In the same 10 week period, working would make me $\$ 9,375$, assuming that I had made $\$ 45,000$ a year.

During the trading period, Intel exhibited a more volatile nature than Microsoft. It did not show a general upward trend. It would move up or down and this may be due to the company. It is not as big as Microsoft and does not have as much buyer confidence. With a lot of competition on the market, it has not set itself as the monopoly Microsoft is.

I would not suggest investing in Intel because it is not clear whether it will go up or down. Microsoft, on the other hand, is a much safer investment. Even though in the short-term it may rise and fall ten or twenty cents, it continues to move upwards.

As a method of trading, I enjoyed swing trading very much. It is a very involved method that requires the investor to continuously watch the stocks for signs to buy or sell and gains or loss can be felt within days instead of months. I suggest one implement the method with a long term plan. Set a goal and an exit price. If the price climbs up to that goal then sell it fast and if it falls below what you set to sell it then sell it before you lose too much. Over a short period of time, one can tell that the stock will rise to a certain price then fall down again. By noting its resistance, the highest point that it rises to, and the support, the lowest, within that time period one can add a little more cushion into this method.

## 5. Conclusion



Figure 5.1 Total Portfolio Growth

From the chart, it is clear that each group member experienced solid portfolio growth over the course of ten weeks. The Dow Jones Industrial Average climbed 5.4\% over the same time period; the DJIA is a reliable performance indicator of the entire stock market. Although our stocks were not solely contained within the pool of 30 blue chip companies, it is widely acceptable to compare portfolio growth to these 30 stocks.

## Vannak

Vannak's swing trading methodology produced a $16.74 \%$ gain over ten weeks. His use of timed buys and sells in large streams allows him to see capital gains of several hundred dollars per sell. Vannak traded between Microsoft and Intel Corporation. Microsoft saw their stock grow under $10 \%$ during the ten-weeks. The Intel Corporation grew roughly
7.5\% over the same time period. An advantage to swing trading allows the trader to see distinct market patterns and act with watchful precision.

## Karl

Karl's use of fundamental analysis proved to be successful, earning Karl $12.51 \%$. Several research tools were taken into consideration when selecting companies with value which was not reflected in their market price. Karl examined sales, return on investment capital, return on equity, earnings per share and operating cash flow to determine which companies were best managed and suited to grow in the stock market. eBay Incorporated was a smart investment for Karl as the company's stock price grew over $20 \%$ in during the trading session; Karl held on to this stock for a majority of the 10 weeks.

## Nick

Nick and Jorge used technical analysis and frequent trading to compound their portfolio growth. Nick traded less often than Jorge and remained within a pool of 12 companies to earn $9.08 \%$ after brokerage fees. "Buy low, sell high" is the phrase echoed by technical traders. The primary concept behind Nick's method was to select companies which were poised to grow during the trading session, and act within the cyclical motions in the stock price. Many times, stocks would fall by mid-day and climb to above the previous day's high within several hours. Nick would often buy during the troughs in stock price and sell during an afternoon run.

## Jorge

Jorge also employed technical trading to earn a $4.4 \%$ profit on his portfolio. Jorge's strategy revolved around frequency to attain his profits. Trading roughly 20 times per week and mainly staying within a one day trading time frame, Jorge bought when there was a downturn in price per share, and would often sell late in the day to earn quick profits. Overall, Jorge had the highest number of trades, and as a result higher brokerage costs, but his methods were tested week in and week out and worked to beat the market's performance over the 10 week session.

## Ideal Method

There is no "best" or ideal method for operating in the stock market. As with many practices, the time one puts into researching companies and market patterns will be a determining performance factor. In Karl's case, he spent time researching the right companies in which to invest. Vannak used high volume buys and precise timing to properly execute swing trading and earn his profits. Jorge and Nick used frequency and quick action to earn profits on a much smaller timeframe.

If one were to combine these methods, however, we believe that his performance would be greater than adhering to a singular trading method. If one were to employ fundamental analysis to examine expected company performance prior to investing, select aspects of swing trading to help predict market action, and use technical analysis to make properly timed buys, one would see their portfolio's growth shadow that of the market.

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## Appendix

## Appendix A - Time Table

| Term/Week | Task(s) |
| :--- | :--- |
| A1 | - |
| A2 | 3 Objectives |
| A3 | Research |
| A4 | Introductions (chapter 2) |
| A5 | Begin trading/ research companies |
| A6 | Data (chapters 3+4) |
| A7 | Data |
| BREAK | Data |
| B1 | Data |
| B2 | " |
| B3 | " |
| B4 | " research new methods (ch. 5-8) |
| B5 | End of trading/ beginning of analysis |
| B6 |  |
| B7 | Revin compiling rough drafts |
| BREAK | Research and writing paper. |
| C1 | Finalize rough drafts. |
| C2 | Revisions |
| C3 | C4 |
| C5 | C6 |
| C7 |  |

Table 7.1-Time Table for IQP

