Development of a Lower Limb Exoskeleton and Application of Learning from Demonstrations for Controllers

by

Nathaniel Goldfarb

A Dissertation

Submitted to the Faculty

of the

WORCESTER POLYTECHNIC INSTITUTE

In partial fulfillment of the requirements for the

Degree of Doctor of Philosophy

in

Robotics Engineering

May 2022

APPROVED:

Professor Gregory S. Fischer, Dissertation Advisor

Professor Karen Troy/Committee Member

Professor Jing Xiao, Committee Member

Professor Berk Calli, Committee Member