phone: (425)829-7624 email: borabanjanin@yahoo.com

Education University of Washington - Seattle September 2014 - Expected August 2019

PhD Student in Electrical Engineering

University of Washington - Seattle

September 2009 - June 2013

Bachelor of Science in Electrical Engineering Embedded Computing and Control Systems

University of Washington Experience

Research Assistant

Seattle, WA

June 2015 – Present

Conducted research under the supervision of Prof. Sam Burden in the BioRobotics Lab. Honorable Mention for the NSF GRFP award.

University of Washington

Teaching Assistant

Seattle, WA

September 2014 – June 2015

Helped teach Control System Analysis I and the Controls, Robotics, and Systems Capstone class.

Microsoft Software Engineer

Seattle, WA

June 2013 – September 2014

Worked in the Data Platform and Services Group of the Supply Chain Unit. Received the Partner Excellence Award.

Sonosite DSP Software Intern Bothell, WA July 2012 - June 2013

Performed algorithmic model maintenance in Matlab and C. System and DSP testing using automated ruby scripts.

BioRobotics Laboratory

Undergraduate Researcher

March 2012 – June 2013 Seattle, WA

Research, design, and project planning on robotic and haptic devices.

and Publications

Selected Projects Modeling and predicting dynamic cockroach locomotion Winter 2014-Spring 2016 B. Banjanin, S. A. Burden, T. Y. Moore, S. Revzen, and R. J. Full. Estimating predictive dynamical models of legged locomotion from data. Yearly meeting of the Society for Integrative and Comparative Biology (SICB), 2016.

Learning policies for hybrid dynamical systems

Fall 2016-Present

B. S. Banjanin, S. A. Burden. Nonsmooth optimal value and policy functions for mechanical systems subject to unilateral constraints. arXiv:1710.06745, 2017.

Modeling the effect of ankle foot orthoses

Fall 2016-Present

M. C. Rosenberg, B. S. Banjanin, M. Yamagami, S. A. Burden, K. M. Steele. Practical modeling of kinematic and motor response to ankle orthosis stiffness: a comparison of candidate models and states in healthy adults. In Preparation, 2018.

Skills **Programming**

Experienced in Python; NumPy and Pandas stack. Proficient in C, Java, Matlab, and SQL.

Technical Expertise

Control Theory - Linear Systems, Hybrid Systems, Optimal Control.

Data Science - Probabilistic and Statistical Methods, Reinforcement and Deep Learning.