

# **EDUCATION**

## **UNIVERSITY OF WATERLOO**

Bachelor of Applied Science in Mechatronics Engineering Sept 2010 - May 2015 Waterloo, Canada

# COURSEWORK

### **UNDERGRADUATE**

Autonomous Mobile Robotics Numerical Control of Machine Tools Multivariable Control Systems Design for Manufacturing Conflict Resolution

# SKILLS

#### **SOFTWARE**

Core Competencies: C++ • Python • ROS Linux • git • vim

Prior Experience:
OpenCV • MATLAB • LATEX
Google App Engine

### **MECHANICAL**

SolidWorks • OnShape Manufacturing Processes DFM • DFA SCM • Prototyping

# **INTERESTS**

Urban Sketching: Porfolio Sample

Cycling: Strava
Reading: Goodreads
Craft Beer Untappd

Japanese: JLPT N3 Certification

Acoustic Guitar Bouldering

# **EXPERIENCE**

## MAGAZINO GBMH | Mechatronics Engineer

Apr 2018 - Present | Munich, Germany

- Mechanical design of autonomous mobile logistics robots
- Development of software infrastructure to enable modular operation, including retrofits and customizable components
- Coordination between hardware and software development teams

## RAPYUTA ROBOTICS | Mechatronics Engineer

Jul 2017 - Feb 2018 | Tokyo, Japan

- Mechanical design of quadrotor drone and docking station
- Supply chain management, including a trip to China
- Optimized workflow by introducing CAD version control system

# RAPYUTA ROBOTICS | Robotic Software Developer

May 2015 - Jul 2017 | Tokyo, Japan

- As team lead, successfully delivered autonomous landing feature
- Developed and presented technical demonstrations for clients
- Full-stack developer multivariable controls to computer vision

## THALMIC LABS | Machine Learning Intern

May 2014 - Aug 2014 | Waterloo, Canada

- Worked on software for Myo gesture recognition armband
- Created internal tools for analyzing algorithm performance

# **SUTD** | Autonomous Vehicles Research Assistant

Sept 2013 - Dec 2013 | Singapore, Singapore

- Developed real-time mass estimation algorithm for electric vehicles
- Conducted real world tests using Mitsubishi iMiEV and Toyota Prius

### UNIVERSITY OF WATERLOO | Research Assistant

Jan 2013 - Apr 2013 | Waterloo, Canada

- Worked at the Center for Theoretical Neuroscience
- Researched symbolic representation in high dimensional vector spaces
- Implemented reinforcement learning algorithms simulating rat behaviour

## **RESEARCH IN MOTION** | Digital Signal Processing Intern

May 2012 - Aug 2012 | Waterloo, Canada

- Evaluated 2G/3G signal processing algorithms against 3GPP standard
- Refactored and optimized various signal processing functions in C

## **P&P OPTICA INC.** | Junior Design Engineer

Sept 2011 - Dec 2011 | Waterloo, Canada

- Created parts, assemblies and technical drawings for spectrometers
- Worked in Class 1000 cleanroom environment