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

LANGUAGES

German: Working competency Japanese: JLPT N3 Certification

SOFTWARE

C++ • Python MATLAB • ROS

MECHATRONICS

Prototyping and Testing
CAD (SolidWorks)
DFM • DFA
Sensor and Actuator Selection
Electromechanical Integration
Lathe and Mill Operation

INTERESTS

Acoustic Guitar Board Games Bouldering Craft Beer Cycling Sci-Fi & Fantasy Urban Sketching

PROFESSIONAL EXPERIENCE

MAGAZINO GBMH | Mechatronics Engineer

Apr 2018 - Present | Munich, Germany

- Mechanical design of autonomous mobile logistics robots
- Responsible for multi-axis suction array based manipulator, including sensor selection and electrical integration
- Development of software infrastructure to enable modular operation, including retrofits and customizable components
- Multi-team coordination for prototype testing and evaluation in situ
- Vacation stand-in for hardware team lead, including syncing with C-level, sprint planning and supporting agile workflow

RAPYUTA ROBOTICS | Mechatronics Engineer

May 2015 - Feb 2018 | Tokyo, Japan

- Mechanical design of quadrotor drone and docking station
- Supply chain management, including a trip to China
- 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

- 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

P&P OPTICA INC. | Junior Design Engineer

Sept 2011 - Dec 2011 | Waterloo, Canada

• Created parts, assemblies and technical drawings for spectrometers