Connor Smith
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Education

University of Waterloo — Waterloo, Canada
B.A.Sc., Mechatronics Engineering — *Sep 2010 – May 2015*

- Relevant courses: Autonomous Mobile Robotics, Numerical Control of Machine Tools, Design for Manufacturing, Multivariable Controls

Work Experience

AbCellera Biologics — Vancouver, Canada
Lead, Robotics Software (prev. Senior Mechatronics Engineer) — *Oct 2020 – present*

- End-to-end ownership of instrument control software for proprietary high-throughput single-cell screening platforms powering AbCellera's antibody discovery pipeline
- Developed computer vision algorithms for cell segmentation and prediction of antibody-secreting cell properties
- Collaborated closely with scientists and cross-functional technical teams to scope, execute and deliver experimental workflows and integration projects
- Managed full software lifecycle on a lean team: build systems, software/hardware upgrades, third-party integrations and data analysis tooling
- Promoted from Mechatronics Engineer (2020) to Senior Mechatronics Engineer (2021) to Lead, Robotics Software (2025)

Magazino GmbH — Munich, Germany
Mechatronics Engineer — *Apr 2018 – Sep 2020*

- Mechanical design of autonomous mobile logistics robots
- Responsible for multi-axis suction array based manipulator, including sensor selection
- Development of software to enable modular robot descriptions, allowing sensors, kinematic chains and collision geometry to be easily modified
- Multi-team coordination for prototype testing and evaluation in situ
- Stand-in for hardware team lead, including syncing with C-level, sprint planning and supporting agile workflow

Rapyuta Robotics — Tokyo, Japan
Mechatronics Engineer — *May 2015 – Feb 2018*

- 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

Internship Experience

Thalmic Labs — Waterloo, Canada
Machine Learning Intern — *May 2014 – Aug 2014*

- Developed software for Myo sEMG-based gesture recognition armband

- Created internal tools for analyzing algorithm performance

Singapore University of Technology and Design Singapore
Autonomous Vehicles Research Assistant *Sep 2013 – Dec 2013*

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

Center for Theoretical Neuroscience Waterloo, Canada
Research Assistant *Jan 2013 – Apr 2013*

- Researched symbolic representation in high-dimensional vector spaces
- Implemented reinforcement learning algorithms simulating rat behaviour

Skills

Programming Languages: Python, C++

Natural Languages: German (proficient), French (proficient), Japanese (intermediate, JLPT N3)

Tools & Platforms: Linux, Git, Docker, CI/CD, LLM-assisted development

CAD: SolidWorks, OnShape

Lab Skills: Biohazard safety training (CL2+), cleanroom protocols

Other: Technical leadership, cross-functional collaboration, agile development, technical writing