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Mechatronics Developer

Education

Mechatronics Engineering, University of Waterloo

June 2019

- Option in Artificial Intelligence, Co-op
- B.AS Cumulative Average: 87%

Cultured Meat Work Experience

Co-Founder & CEO | Another Fish

2020 - 2022

- Led team to X-PRIZE Semi-finals, winning \$17'000 (USD)
- Designed a Microfluidic System that would autonomously create unique culture medias, grow mammalian cells on microcarriers in culture media and evaluate media effectiveness
- Implemented optimization algorithms to determine what culture media to test
- Gained experience with mammalian cell culture

Co-op Experience

Autonomous Car Software Developer | *U of Waterloo*

May - Aug 2018

- Developed an automated calibration method for autonomous car sensor system

Embedded Al Software Developer | Coherent Logix

Sept – Dec 2017

- Implemented an efficient convolution neural network algorithm on proprietary hardware

Localization Software Developer | Avidbots

Sept – Dec 2017

- Implemented probabilistic mapping and localization algorithm for mobile robot

Research Assistant | U of Waterloo

April – Aug 2016

- Developed and implemented an optimization procedure for an 8 variable non-linear machine

Life Science Automation Designer | ATS Automation

Sept - Dec 2015

- Worked with customers, vendors, tool makers, and technicians to coordinate various tasks

Mechatronics Test Designer | Synaptive Medical

Jan – Aug 2015

- Established and executed a validation process for neurosurgical robot

Projects

Multi-Camera Conference Calling System

2019

- Designed and built a multi-camera system that uses AI to map location of people and point one camera at whomever is speaking and another at whomever is most likely to speak next

Autonomous Under-Water Vehicle

2018

- Built waterproof hull, integrated 6 motors, a depth sensor, proximity sensors and a camera
- Programmed autonomous navigation system

Activities and Awards

Finite Element Analysis – Best Overall Project

2016

- Awarded \$1000 for project which minimized stress concentration in a carabiner using ANSYS

Sandford Fleming Foundation Award

2016

- Awarded \$300 for outstanding written communication in work term report

Skills

Languages: C, C++, Python, MATLAB

Cultured Meat: Mammalian Cell Culture, Microcarriers