HENRY KAN CHEN

Self-Driving Vehicle Researcher / I&C Engineer

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Objective

To bring about a driverless revolution with self-driving vehicles and help to shape the future of transportation and urban life.

Professional Experience

Self-Driving Vehicle Researcher

Waterloo Centre for Automotive Research — University of Waterloo

- Designing and adding exterior signal lights to the Autonomoose, Canada's first complete autonomous driving system
- Integrating light control circuits, through ROS, with vehicle sensors such as camera, lidar, and wheel speed sensors
- Facilitating vehicle to infrastructure (V2I) communication using RF modules and Bluetooth devices
- Working with the SAE J3134 automated driving system lamps task force to develop an international signal light standard for driverless vehicles
- Proficient with Python / C++, deep learning, and reinforcement learning

Instrumentation & Control Engineer

TC Energy (formally TransCanada pipelines) — Calgary AB

- Design and develop complex process control systems for large industrial facilities
- Integrate sensors and actuators into flexible engineering solutions, with documentation, for scalable deployment across facilities
- Quarterback the project design and development process, working with operations personnel, took 3 large projects from conception to completion
- Once, led a $3.5M control system upgrade project, working with limited resources and staff, upgraded 150+ facilities over 3 years. As a result, facilities became safer and more reliable.

System Integration & Embedded Software Intern

General Electric Canada Inc. — Calgary AB

- Develop test tools for embedded software for substation controllers

Education

Masters of Mathematics in Computer Science

University of Waterloo

Expected Graduation Date: 2019/10

Bachelor of Science in Computer Engineering

University of Calgary

Graduated with Distinction