FEILAN JIANG

@ feilanjiang@gmail.com   📞 1-519-574-3317   🔗 f-jiang.github.io   in linkedin.com/in/f-jiang   github.com/f-jiang

EXPERIENCE

ML and Computer Vision Intern
Microsoft Corporation

📅 May 2020 –   📍 Redmond, WA (Remote Internship)

- Using image processing and deep learning to automate key manufacturing quality checks

Infrastructure Engineering Intern
Uber ATG

📅 Sep. 2019 – Dec. 2019   📍 San Francisco, CA

- Developed an AWS pipeline for storing and searching thousands of calibration files, helping to enable one-touch calibration for any LiDAR test sensor

Localization and Mapping Developer
Avidbots Corp.

📅 Jan. 2019 – Apr. 2019   📍 Kitchener, ON

- Created an automated ROS LiDAR calibration system used to prepare dozens of floor-scrubbing robots for the company's clients
- Prototyped a custom visual SLAM algorithm to assist with cleaning-plan start-pose correction and map symmetry-breaking

ADAS Software Developer
BlackBerry QNX

📅 May 2018 – Aug. 2018   📍 Ottawa, ON

- Enhanced a LiDAR driver with a point-cloud merging feature that shortens each library usage by up to 100 lines of C++ code
- Created and deployed an object-detection demo to showcase the ADAS stack's point-cloud downsampling and segmentation capabilities

PROJECTS & ACTIVITIES

Future Undergraduate Student Researcher 🔗

- Research areas are perception and navigation in the self-driving space

WATonomous Perception Team Member 🔗

- Currently a computer vision engineer on a student team developing a level-4 autonomous vehicle for the SAE AutoDrive challenge
- Implemented a traditional computer vision-based lane detection system in OpenCV and ROS

Autonomous Mobile Robot 🔗

- Developing a mobile robot that is controlled by hand gestures and uses the ROS navigation stack
- Currently experimenting with navigation technologies such as path-planning, SLAM, and obstacle avoidance

SKILLS

ROS   PCL   OpenCV
TF/Keras   PyTorch

AWS   Docker
Kubernetes

Boost   NumPy
Matplotlib   SQL
OpenGL

Git   Bash Scripting
SVN   GDB   Valgrind
Ubuntu   QNX Neutrino

SOLIDWORKS   AutoCAD
3D Printing   Soldering
Machining

LANGUAGES

C++   ~4 Years

Python   ~3 Years

C   ~2 Years

JavaScript   ~1.5 Years

EDUCATION

BASc Mechatronics Eng.
University of Waterloo
📅 Sep. 2016 – Apr. 2021

INTERESTS

Fitness   PC Building
Cooking   Music Lover
Sim Racing   Reading