

## http://peterleng.com peterleng1234@gmail.com | 519-729-8903

## SKILLS

### **LANGUAGES**

Python • JavaScript C++ • Java • C#

## FRAMEWORKS & TOOLS

NumPy • Pandas • Matplotlib Tornado • Flask • NodeJS Tensorflow • Pytorch • Keras • CUDA PostgreSQL • MongoDB RabbitMQ • Redis API Gateway • AWS Lambda • S3

## LINKS

Github:// peterl328 LinkedIn:// Peter Leng Devpost:// Peter Leng

## **FDUCATION**

### UNIVERSITY OF WATERLOO

B.A.Sc. Computer Engineering Expected May 2020| Waterloo, On

### **WATONOMOUS**

**UW AUTONOMOUS VEHICLE TEAM** Localization & Mapping

# CERTIFICATES

## **UDACITY NANODEGREE**

Self-Driving Car Engineer

#### **COURSERA**

Machine Learning Control of Mobile Robots

## **AWARDS**

## **HACKATHONS**

TreeHacks 2017 - Top 10/130 HackPrinceton 2016(F) - Top 5/100 HackPrinceton 2016(S) - Top 5/80 BostonHacks 2015 - Top 1/60

## **EXPERIENCE**

## **CRUISE AUTOMATION** | Software Engineering Intern

Sept 2019 - Present | San Francisco Bay Area

• Working in the simulation Team

## **SPARTAN FUND MANAGEMENT** | LEAD QUANTITATIVE ENGINEER

May 2018 - Present | Toronto, ON

- Managed a fund (\$5M AUM) with a small team of engineers and researchers while reporting directly to the CEO
- Designed an entirely new trading system using micro-services architecture on AWS including parallel trading pipelines which improved back-text executive time from 5-6 hours to 5 minutes for a 20-year test
- Developed volatility forecasting models using multi-layer recurrent neural networks with Pytorch

Used: Pandas, NumPy, Pytorch, MongoDB, NodeJS, AWS Lambda, ElastiCache, Redis, RabbitMQ

# MACKENZIE INVESTMENTS | QUANTITATIVE RESEARCHER INTERN Jan 2019 - April 2019 | Toronto, ON

- Implemented a high-alpha trading strategy for the forex market using principal component analysis and regression models on financial factors
- Developed a sentiment engine that generate trading signals from Trump's twitter feed

Used: Pandas, NumPy, Matplotlib, Pytorch, PostgreSQL

### PLANGRID | SOFTWARE ENGINEERING INTERN

Sept 2017 - Dec 2017 | San Francisco Bay Area

• Designed and built device sync feature across all mobile platforms (iOS, Android, Windows) to keep track of documents and sheets sync status

Used: C#, WPF, Java, Android, Flask

#### **SKYWATCH** | Backend & Data Engineering Intern

Jan 2017 - May 2017 | Kitchener, ON

- Decreased database query time by using indexes, optimizing SQL statements and RDS server configurations from an average of 5 minutes to within 30 seconds
- Developed a download proxy server to handle asynchronous image downloads using bit streaming which increased average download speed by 40%
- Built an image clipping micro-service using Python-GDAL allowing users to download clipped satellite images

Used: Python, Tornado, GDAL, PostgreSQL, AWS Lambda, S3

# **PROJECTS**

### **SLITHERIO-AI** | Neuro-Evolution of Augmenting Topologies

Uses Neural-evolution of Augmenting Topologies and OpenAl gym to train an Al to play SlitherIO