AUSTIN LUU

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Phttps://austinluu.me

EDUCATION

Deep Learning Specialization

DeepLearning.Al

• Neural Networks, Hyperparamater Tuning, Regularization and Optimization, Machine Learning Project Structure, Convolutional Neural Networks, and Sequence Models

B.Eng Mechatronics Engineering

Ryerson University

• Dean's Honours List

• Robotics Intl. Society of Manufacturing Engineers Award

• Relevant Courses: Intelligent Systems, Real-Time Computer Control Systems, Linear Algebra, and Statistics

TECH SKILLS Tools

C++

GPA

3.70 /

4.33

Python MATLAB

Octave

SQL

GIT

Linux

Java

Microsoft Excel

PowerBl

Packages & Frameworks

TensorFlow Scikit-Learn NumPy

SciPy

Pandas

Matplotlib

Jupyter Notebook

OpenCV

Machine Learning

Statistical Analysis

RNN

CNN

Linear/Logistic Regression

SVM

K-Means Clustering

Regularization

Adams

Hyperparamater Tuning

EXPERIENCE

Data Analyst

TOHacks

01/2022 - Ongoing ♥ Toronto, Canada

· Working on increasing future participant submission rate through a data supported admission process

Process Engineer

AlphaPoly Packaging

- Analyzed manufacturing operation data in PowerBI and Excel to redevelop STD operating procedures, forecasting a 65% reduction in operation
- Developed end-to-end quality testing across all manufacturing departments reducing 2021 June-to-September quality cases by 31%

Product Data Analyst

Celestica

- Initiated and managed Aerospace & Defense value engineering cost saving projects, reducing excess inventory by over 20% and expanding customer AVL portfolio by over 15%, leading to an annual cost savings of \$1.5 million
- · Analyzed over \$5 million in customer portfolio data using PowerBI and Excel; identifying demonetized product developments and the impact of commodity price changes

Robotics Engineer

Rverson Rams Robotics

- Piloted development of dynamic force model simulations in MATLAB; increasing structural integrity by 35%: placing 2nd internationally at URC2019
- Led an agile team of 15 in design & development of an autonomous robot with PID control in C++; placing 1st nationally at 2018 & 2019 VEXU competitions

Research Assistant

Ryerson University

Designed, modeled, and simulated soft robotic continuum arm using Python in GMSH, SOFA, and ANSYS to analyze mechanical behaviour

SOCIALS

LinkedIn





GitHub

www.github.com/austinluu

PROJECTS

RoadCV

· Developed a car detection system using YOLO in TensorFlow to detect and draw bounding boxes around 80 potential classes for a self-driving car

Kabo

- · Discord bot for simulating karaoke with live pitch and lyrical correctness scoring
- · Developed in Python and JavaScript using Aubio, Numpy, SpeechRecognition, Pydub, Wave, and LyricsGenius, Node.js, Discord.js, and PythonShell

Parallel Computing Drone Swarm

- Built a hazard detection 2D mapping robot which collects thermal, moisture, and relative location data from two autonomous IoT ground drones
- Developed with: Python, C++, MQTT Protocol, Arduino 101s, laser cutting, and 3D printing

Vision Motion

· Leveraged real-time computer vision using OpenCV on mobile devices to track and graph the projectile motion of an object