First **Las**

Experience

Small, Established Company

MACHINE LEARNING INTERN

- Spearheaded development of an Android application and statistical models to bring parts of the ERP software to mobile
- Increased client efficiency by 35% with savings of over \$10 million by integrating factory KPIs to optimize logistics and metric tracking
- Created electrical and software mechanisms and pipelines for efficient data gathering, cleansing and visualizations from factory machinery
- Improved existing model performance by 18% through new image-preprocessing techniques from Tensorflow, OpenCV and scikit-learn
- Handled medium-large datasets (>100 GB) with Pandas, and efficient SQL queries

University Hyperloop Team

COMMUNICATIONS SOFTWARE LEAD

- Leading a team of software engineers responsible for creating communications software for a Hyperloop pod
- Led efforts to create a finite state machine for communications software on pod
- Spearheading development of high-level architecture of code, with a focus on modularization, readability and maintainability
- Developing communications software on UDP Multicast, LCM and MQTT

Small Startup

DATA SCIENCE INTERN

- Developed flexible code for data analysis of various metrics using Python by reading live user data to generate statistical results
- Created a library to analyze user action data to predict future actions using a Markov Chain
- Implemented a Monte Carlo simulation for different demographics to compare usage patterns
- Utilized Tableau for data visualization and to identify key points of interest, allowing development of critical app features
- Reduced power consumption by 12% by migrating performance heavy tasks to server, aiding in optimization and scalability
- Drove a 14% increase in daily active users by making marketing decisions with key insights from statistical analyses using scikit-learn

Projects

predictstart

React, Python, Pandas, Scikit

- Trained various data science models to predict the success of a Kickstarter Project, with an accuracy of 80% and with high precision and recall
- · Prevented many avenues of data leaking through focused efforts on data cleaning and feature selection
- Developed Python web-scraping techniques to make predictions on new data
- Employed SHAP Values to indicate feature importance and suggest improvements to projects

context

Android (Kotlin, Java), Python

- An Android application to allow data/wifi-free internet access to travellers through text-based communication
- Minimized user costs by optimizing bandwidth usage through the use of caches and aliases
- Featured OCR data-entry using Google Mobile Vision for translations in different languages
- · Produced robust web scraping algorithms to obtain directions, translations, Google search results, and save web pages from results

puddle

Python, Flask, TensorFlow, SQL

- A command-line tool for ML developers to deploy, host and demo their models online with just one command
- Implemented support for TensorFlow, LGBM and PyTorch text and image models
- Collaborating with contributors as an **open source** project to add support for more popular ML frameworks and improve efficiency
- Enhanced bandwidth usage to lower Amazon S3 costs by 8% by optimizing data tunnelling and using a pass-by-reference structure

faceauth-android

Android (Kotlin, Java), Python, TensorFlow

- An Android library to allow developers to integrate facial authentication technology into their applications
- Boosted user privacy and security through consultations with members and experts of the Android community
- Resolving issues by implementing wanted features, such as embedding encoding, gesture recognition and blink detection

Education

University of City

BASC IN ENGINEERING SCIENCE, MAJOR OF INTEREST: MACHINE INTELLIGENCE

Relevant Coursework: Introduction to Programming, Data Structures and Algorithms, Engineering Mathematics and Computation, Digital and Computer Systems, Probability and Statistics

City, Province

City, Province

April 2019 - Present

July 2018 - August 2018

February 2019 - June 2019

June 2019 - July 2019

August 2019 - Present

July 2019 - Present

City, Province

September 2018 - April 2022

City, Province

May 2019 - August 2019