Loc Vu

vhploc@gmail.com github.com/loc-vu linkedin.com/in/loc-vu (619) 873-5773

EDUCATION

University of California, San Diego

Expected June 2022

B.S Computer Science

GPA: 3.78

 Relevant Courses: Data Science in Practice, Linear Algebra, Statistical Methods, Object-Oriented Design, Software, Theory of Computation, Advance Data Structures, Software Engineering

EXPERIENCE

Project Lead

January 2019 – Present

Project: YouTube Video Title Classification and Generation

Organization: Data Science Student Society

- Utilizing Naïve Bayes, Random Forest, Linear SVM, and Logistic Regression as base models for NLP
- Initial results show 86% to 99% model accuracy
- Performed text generation using LSTM on YouTube Titles

Software Developer

November 2019 – Present

Project: GreenPoint Rated

Organization: Triton Software Engineering

- Developing a mobile for **Build It Green** to track the carbon emissions of a given household and incentivize homeowners to pursue greener alternatives
- Utilizing Node.js and React Native for cross-platform compatibles

Patent Research Assistant Intern

May 2019 – September 2019

Company: TuSimple, Inc.

- Researched over 1000 existing patents related to autonomous vehicles using Google Patent and USPTO
 Database in order to categorize the technical focus of competitors
- Established and maintained a database of related competitor patents to effectively characterize the current landscape of a specific patent technical area

PROJECTS

Patent Scraper

July 2019 - September 2019

Python, IPython, Google Drive API, PatentView API

- Utilized PatentView API to scrape information from USPTO Database and generate a corresponding CSV file, uploaded to cloud using Google Drive API
- Automated the processes of collecting and generating a patent landscape to increase search efficiency and eliminate the need for manual searches

Robocall Analysis

September 2019 – December 2019

Python, IPython, FCC API

- Analyzed 1.6 million FCC Unwanted Call complaints from 2014-2019 to explore possible trends through generating visualization using matplotlib and evaluating linear regression R-squared values
- Concluded no distinguishable trends in robocall activities expect increased quantity in more populated areas

RESEARCH EXPERIENCE

Application of Hyperdimensional Computing on Embedded Systems

October 2019 - Present

Advisor: Tajana Rosing, UCSD

- Researching the applications of **hyperdimensional computing** as a data independent alternative to traditional neural networks-based **reinforcement learning**
- Developing a semi-autonomous microbot capable of following a line using OpenCV to test the
 effectiveness of reinforcement learning model

SKILLS

Programming & Languages:

Python, SQL, JSX, TypeScript, Java, C/C++

Frameworks & Libraries:

MS Excel, pandas, matplotlib, scikit-learn, keras, YouTube API

Tools & Methodologies:

Unix/Linux, Git, TravisCI, Agile/scrum

OS:

Windows, Linux

Extracurriculars: Project Lead @ DS3: Data Science Society, Software Developer @ Triton Software Engineering