Loc Vu

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EDUCATION

University of California, San ***Expected March 2022***
B.S. Computer Science ***GPA: 3.84***

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

EXPERIENCE

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**

Project Lead *January 2019 – Present*
Project: YouTube Trends Predictor
Organization: Data Science Student Society

- Analyzing the reliability of YouTube video title in predicting category
- Utilizing **Naïve Bayes, Random Forest, Linear SVM, and Logistic Regression** as base models for **NLP**
- Initial results show **86% to 99%** model accuracy

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 to test the effectiveness of reinforcement learning model

SKILLS

Programming & Languages: *Python, SQL, JSX, TypeScript, Java, C/C++*
Frameworks & Libraries: *React/React-Native, Node.js, Docker*
Tools & Methodologies: *Unix/Linux, Git, Continuous Integration, Agile/scrum*
OS: *Windows, Linux*
Extracurriculars: ***Project Lead*** *@ DS3: Data Science Society*, ***Software Developer*** *@ Triton Software Engineering*