Loc Vu

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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 – June 2020*
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% - 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

Hyperdimensional Computing on Embedded Systems *October 2019 – Present*
Advisor: Tajana Rosing, UCSD

- Tested the performance of **Hyperdimensional Computing** to classify angle values from line images against **SVM** and **Linear Regression**
- Observed **3-8x speedup** in train and prediction as well as **115x lower** Mean Absolute Error

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*