**Loc Vu**

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**EDUCATION**

**University of California, San Diego *Expected June 2022***

*B.S Computer Science* ***GPA: 3.84***

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

**EXPERIENCE**

**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

**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**](https://github.com/loc-vu/patent-scraper)*July 2019 – September 2019*

[*Python,*](https://github.com/loc-vu /patent-scraper) *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, 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*