

# Loc Vu

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## EDUCATION

University of California, San

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

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:**

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

**Tools & Methodologies:**

Unix/Linux, Git, Continuous Integration, Agile/scrum

**OS:**

Windows, Linux

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