# 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.is** 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, 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