# Loc Vu

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## EDUCATION

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

- Relevant Courses:

| | | |
|---|---|---|
| Data Science in Practice | Systems Programming | Object-Oriented Design |
| Software Tools | Theory of Computation | Advance Data Structures |

## 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

**GreenPoint Rated** *November 2019 – Present*
*Node.js, React-Native, JSX*

- 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

**YouTube Trends Predictor** *January 2019 – Present*
*Python, Youtube API, scikit-learn*

- Analyzing the impact of viewer-count, likes/dislike ratio, and **title sentiment** in predicting **YouTube trending video**
- Utilizing **Naïve Bayes** for **NLP** to develop a **classification model** that predicts a video's genre based on title

## RESEARCH EXPERIENCE

**Hyperdimensional Computing onto 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 to following a line to test the effectiveness of reinforcement learning model

## WORK EXPERIENCE

**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**

## SKILLS

***Programming & Languages:*** *Python, SQL, JSX, Java, C/C++*
***Frameworks & Libraries:*** *MS Excel, pandas, matplotlib, scikit-learn, Google 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*