

# Palaksh Rungta, Junior at UC San Diego

## ABOUT ME

I'm a solution-orientated person who loves to go out of my way to understand and solve problems with clear communication. Being from a data science, cognitive science, & statistics background, I bring a plethora of interdisciplinary expertise useful for a **machine learning/ data science internship!**

## EDUCATION

### UNIVERSITY OF CALIFORNIA, SAN DIEGO (UCSD)

Bachelors of Science in 'Cognitive Science with a specialization in Machine Learning'

Graduation in June 2022 | Cumulative GPA: 3.69 / 4.0 | Major GPA: 3.8 / 4.0

## SKILLS

### PROGRAMMING

Python, Java, C, C++, MySQL

### EXPERIENCED IN

Supervised Machine Learning, Data Structures, Computer Vision, Web Scraping, NLP, APIs, Data Cleaning, Data Analysis/Modeling, Data Visualization

### ALGORITHMS PROFICIENT WITH

Neural Networks, Linear and Logistic Regression, SVM, KNN, Random Forest, Text-to-speech models

### TOOLS & PACKAGES WORKED WITH

Snowflake, Git, Unix, Jupyter, Scipy, Tensorflow, Pytorch, Pandas, Numpy, Matplotlib, Tacotron

## EXPERIENCE

### FinBit.io - An Envestnet Yodlee Company | Remote

DATA SCIENCE INTERN

OCT 2020 - DEC 2020

- Task 1: Find a way to remove duplicate entries from bank transaction data.
  - I used multiple algorithms to recognize and group users with a **98.6% success rate** to avoid duplicate entries and reduce the runtime drastically. Additionally, I was able to extract user location data for **~30%** of the users from just manual bank entries.
- Task 2: Predict user's salary information from bank transaction data.
  - I looked at data points like transaction type, description, dates, and other features to predict this information.
- Received a lot of appreciation from the Founder and CEO.

### Nimber Inc. | San Diego, CA

BUSINESS AND MARKETING INTERN

APR 2019 - OCT 2019

- Task: Develop a viable business plan for pitching to investors.
  - Performed market research, competitor analysis, SWOT analysis, and product pricing to arrive at a presentable investor pitch.
- Contributed in designing and framing content on platforms like Instagram, Facebook, etc. Worked with the UX team on website design and content.
- Signed up **The Design Lab** at UCSD as the **first customer** for Nimber Inc.

## TECHNICAL PROJECTS

### Safe N' Sound - SD Hacks 2019

(CLICK ME FOR LINK)

- Task: To reduce distraction during driving.
  - Deployed facial detection and recognition using **OpenCV** to distinguish between drivers and co-passengers, and alert the driver based on their eye movements and facial expressions.

### Bar Locations and DUI cases

(CLICK ME FOR LINK)

- Task: Examine the correlation between Bar locations and DUI accidents in San Diego.
  - Used various **APIs**, **Geo-spatial analysis**, **Bootstrapping**, and various Machine Learning algorithms such as **SVM** and **K-Nearest Neighbors** to explore the correlation.
  - Found no significant correlation after hypothesis testing using bootstrapping.

### Comparison of Supervised Learning Algorithms

(CLICK ME FOR LINK)

- Task: To measure performance of supervised learning algorithms - **Random Forest**, **Logistic Regression**, and **Artificial Neural Networks** across 4 different datasets.
  - Metrics used were **accuracy**, **F-score**, and **ROC AUC** curve.
  - Found **Random Forest** performing the best across all metrics.
  - The project was a replication of the paper by Caruana and Niculescu-Mizil.

## RESEARCH AND CO-CURRICULARS

### Dr. Rose Yu's COVID-19 Deep Learning Lab

(CLICK ME FOR LINK)

RESEARCH VOLUNTEER

APR 2021 - PRESENT

- Running weekly CDC predictions of death rates using the **DeepGLEAM** deep learning model.
- Used their model to also predict **hospitalization rates** along with mortality rates for the CDC.

### ACM AI Projects Team

APR 2021 - JUN 2021

- Deploying a **Tacotron** based text-to-speech model that can blend different **accent prosody information** using **GANs**.

### Rotaract at UCSD | Student Organization

ACTIVITIES COMMITTEE MEMBER

JAN 2021 - PRESENT

MEMBERSHIP DIRECTOR, 2021 - 2022

JUN 2021 - PRESENT