

# Palaksh Rungta, Senior at UC San Diego

## ABOUT ME

I am a solution oriented person who loves to go out of their way to understand and solve problems with clear communication. Being from a **computer science**, **data science**, and **cognitive science** background, I bring a plethora of interdisciplinary expertise and critical thinking into my work!

## 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: 3.7 / 4.0 | Major GPA: 3.8 / 4.0

## SKILLS

### PROGRAMMING

Python, Java, C++, SQL, MongoDB

### EXPERIENCED IN

Supervised Machine Learning, Deep Learning (GAN, CNN, RNN), Data Structures, Computer Vision, Web Scraping, Natural Language Processing (NLP), APIs, Data Analysis, Data Visualization

### ALGORITHMS PROFICIENT WITH

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

### TOOLS & PACKAGES WORKED WITH

Git, Linux, Jupyter, Scipy, Tensorflow, Keras, Sci-kit learn, Pandas, Numpy, Matplotlib, Tacotron

## EXPERIENCE

### Price.com

DATA SCIENCE AND MACHINE LEARNING INTERN

JUN 2021 - PRESENT

- Experimented with various APIs and queried the results on MongoDB to increase the coverage of multiple fields by up to **83%** which improved the model **accuracy by 9%**.
- Used SQL queries to fix around **80%** of the outdated product links found in all of the company's blogs into a new format in under **3 hours**.

### FinBit.io - An Envestnet Yodlee Company

DATA SCIENCE INTERN

OCT 2020 - DEC 2020

- Applied multiple algorithms to recognize and group users with a **98.6% success rate** to avoid duplicate entries and reduce the runtime drastically.
- Extracted user location data for **47%** of the users from just manual bank entries.
- Used various types of transaction information to predict the salary amount for **73%** of users.
- Received appreciation from the Founder/CEO for improving coverage and performance.

### Nimber Inc.

BUSINESS AND MARKETING INTERN

APR 2019 - OCT 2019

- 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

### Comparison of Supervised Learning Algorithms

(CLICK ME FOR LINK)

- A comparison study to measure the performance of supervised learning algorithms - **Random Forest**, **Logistic Regression**, and **Artificial Neural Networks** using hyperparameter tuning.
- Statistical metrics used were **accuracy**, **F-score**, and **ROC AUC curve** over 4 datasets.
- Found **Random Forest** performing the best (**89.9%** across all metrics tested).

### Bar Locations and DUI cases

(CLICK ME FOR LINK)

- Examined 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.

### Safe N' Sound - SD Hacks 2019

(CLICK ME FOR LINK)

- Deployed a computer vision (**OpenCV**) application to reduce distractions while driving by recognizing the driver from their co-passengers and alerting them based on their facial features.

## RESEARCH AND CO-CURRICULARS

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

RESEARCH ASSISTANT

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 - JUN 2021

MEMBERSHIP DIRECTOR, 2021 - 2022

JUN 2021 - PRESENT