**Harshil Panchal**

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**EDUCATION**

**University of California, San Diego September 2020 – December 2022**

Computer Science B.S. | **Provost Honors** GPA: 3.675

**Ohlone College September 2018 – June 2020**

Computer Science A.S. | **(with Highest Honors)** GPA: 3.89

**Relevant Coursework:**

Operating Systems**\***, Computer Security**\***, Software Engineering**\***, Data Structures/Algorithms**\***, Computer Vision**\***, Computer Architecture**\***, Algorithm Design/Analysis, Database Systems, Assembly Language**\***, OOP with C++**\***, Java Programming**\***

**[\* indicates a grade of A- or higher received]**

**PROJECTS**

**Predicting Cook Times From Recipes November 2022**

UC San Diego | La Jolla, CA

* Employed supervised machine-learning techniques to develop a prediction model to predict cook times from recipes
* Conducted data analysis and evaluated accuracy of ML models with changes to parameters/inputs
  + (TF-IDF, LinearRegression, GradientBoostingRegressor, RF-Reg, RidgeCV)
* Reduced baseline model’s Mean Squared Error (MSE) from 726 to 92.5 **(improvement of ~87%)**
* Implemented using **Python** (**Pandas**, **Scikit-Learn**) **[Brief Report:** tinyurl.com/3zdbkbrf**]**

**Multi-View Stereo 3D Image Reconstruction March 2022**

UC San Diego | La Jolla, CA

* Applied computer-vision techniques for 3D image reconstruction using 49 images of an object taken from different angles
* Utilized Scale Invariant Feature Transform (SIFT) to identify points of interest and find correspondence across images
* Implemented using **Python** (**NumPy**, **OpenCV**)

**Bullet Journal April 2021 – May 2021**

UC San Diego | La Jolla, CA

* Developed CRUD web application in quarter-long Software Engineering course in a team of 8
* Front-end lead, worked with **7 teammates** to facilitate implementation of multiple features in daily and weekly logs
* Created main layout for daily/weekly views, and introduced and implemented **5 core features**
* Used vanilla **JavaScript** and **HTML/CSS [Project Demo:** tinyurl.com/ykkk8suk**]**

**Django Blog September 2020**

Fremont, CA

* Built forum web app that features multiple boards (topics), post, like/dislike, and profile system similar to ***reddit.com***
* Created with **Django** and **Bootstrap4**, and database implemented with **SQLite**

**EmMe – Emotion & Me February 2019**

TreeHacks Hackathon | Stanford University, CA

* Created an interactive text-bot to track + categorize emotional data and monitor mental health with alerts sent to trusted contacts after extended periods of negative spikes
* Used **JavaScript**, **IBM Natural Language Understanding (NLU) APIs**, **Twilio**, and **Firebase**

**LEADERSHIP AND EXTRACURRICULARS**

**Dot-Slash Computer Science Club | President December 2019 – May 2020**

Ohlone College | Fremont, CA

* Led weekly meetings teaching **20+ members** about CS fundamentals, web technologies, API usage, etc.
* Created personalized programs to strengthen club members’ technical skills with personal projects
* Guided and worked alongside **5-10 members** in weekly Leetcode problem-solving sessions
* Provided platform for members to network with club alumni employed by tech-companies (Google, IBM, Microsoft)

**SKILLS**

**Programming Skills:** (**Intermediate:** C++, C, Python, Java, JavaScript) (**Novice:** Django, NodeJS, Express, React, SQL)

**Languages:** English, Hindi, Gujarati