# **OIRUI ZHENG**

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#### **SUMMARY**

Passionate about getting experience in different types of jobs and explore the connection of the job to Data Science. Aspiring to consolidate my skills in Data Science and to support others with such skills.

#### **EDUCATION**

## UNIVERSITY OF CALIFORNIA, SAN DIEGO, La Jolla, California

**Bachelor of Science in Data Science** 

Bachelor of Science in Cognitive Science with Specialization in Machine Learning and Neural Computation

#### **Minor in Business and Economics**

Expected June 2025

- GPA: 3.84
- Course taken: Data Structure Algorithms for Data Science, Statistical Methods, Practice of Data Science through indepth Pandas sets

## CHABOT COLLEGE, Hayward, California

## **Concurrent Enrollment (With KIPP King Collegiate High School)**

August 2022

Course taken: Linear Algebra, Structured Programming in C++, Statistics

## **EXPERIENCE**

## Pattern Analysis on EEG Data for Enhanced Depression Diagnosis **Researcher under Faculty Mentorship Program**

**August 2023-PRESENT** 

- Working under Professor Justin Eldridge for a Machine Learning approach to quantify depression scores.
- Cleaned through the EEG dataset with techniques such as PCA and ICA to identify potential features related to the classification of depression.
- Potentially working with unsupervised ML model to find cluster within the given data, after feature extraction.

## Data Science Projects, San Diego, California **Project**

**September 2022 – March 2023** 

- - Utilized OpenCV Library to trace contours of the image and detect the car license plate if it exits in the image (link)
  - Later used Neural Network: YoloV5 to train the prediction of bounding boxes.
  - Completed Exploratory Data Analysis on the given raw data of Earth Surface Temperature from Kaggle
  - Iterated through the K-Means classification, regression is done on the two different groups classified (link)
  - Utilized Tableau for data visualization in presentation of the overall project and different aspects of Pandas Python library to perform data analysis.

## First Robotics Competition - Robotics Team, San Lorenzo, California **Team Mentor**

**August 2019 – June 2022** 

- - Led a team of 15 people on the design, construction, and program of the robot from scratch.
  - Competed in both First Tech Challenge, and the First Robotics Challenge
  - Read through the WPILib Java libraries and documentations.
  - Organized and conducted meetings to meet the competition deadlines.
  - Communicated important events with all team members.
  - Organized and Bill of Materials with the budget for the given year.

#### **SKILLS & ACTIVITIES**

- Familiarity in: Java, Python, C++, R, Pytorch, Scikit-Learn
- In the process of implementing the board game of Da Vinci's Code into a single player program
- First Robotics Challenge: 2022 Judges' Award San Francisco Regional
- Completed regression and prediction about Earth Surface Temperature (link)
- Completed a Data Science Project about airline passenger satisfaction, in DSC 96
- Language: Native speaker in Mandarin and limited proficiency in Cantonese
- College Board: AP Scholar With Distinction
- Experience in cultural dancing for seven years