

★ www.edwardcen.github.io | ☑ github.com/edwardcen | ☐ linkedin.com/in/edwardcen

Education \_

#### University of California, Berkeley

Berkeley, California

B.S.E IN ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

May 2021

• Relevant Coursework: The Structure and Interpretation of Computer Programs, Designing Information Devices and Systems I, Data Science

Bellaire High School Houston, Texas

HIGH HONORS MAGNET DIPLOMA

May 2017

Valedictorian – Rank 1 out of 765 students, SAT: 2370, GPA: 4.0, National Merit Scholar, Congressional Award Gold Medal

# Technical Experience \_

Nommery Berkeley, CA

DATA ANALYTICS INTERN

Sep. 2017 - Present

- Segmented Nommery's users by motivations and interests and discovered meaningful correlations using Pandas and Jupyter Notebook
- · Combined US Census data and OpenTable API to directly target audiences based on location and demographics
- · Summarized research and generated data visualizations using Seaborn about user base clusters for marketing

Rice University Houston, TX

**ELECTRICAL ENGINEERING RESEARCH INTERN** 

Jun. 2016 - Aug. 2016

- · Conducted independent research on organic photovoltaics and devised new device fabrication procedures using Gallium-Indium as electrode
- Designed Excel spreadsheet algorithm for efficient interpretation of solar simulator data

## **Projects**

### **Stock Prices Web Scraper**

- · Used an read\_eval\_print loop and string manipulation to continuously read in user input about stocks and data points of interest
- · Pulled real-time data from Yahoo Finance API using standard Python requests library and parsed into csv format to display in Pandas dataframe
- · Interpreter keeps track of history of searches such that user can switch between stocks without having to reload information

#### **Food Atlas Data Analysis**

- Visualized demographics, food access, and income data of over 3000 counties with obesity rate using python libraries to quickly discover key factors
- Developed linear regression model for obesity which outperformed default methods by 10% and quantified the weight and direction of factors
- Trained logistic regression model which classified central states with up to 11% better accuracy than null methods

#### **3D Tic Tac Toe**

- · Implemented OOP paradigms for game logic elements and used Tkinter to design GUI with in-game menus and click-based input
- · Designed AI using minimax algorithm with pruning after every additional depth in gametree

## **Leadership Experience**

# **Data Science Society at Berkeley**

Berkeley, CA

ANALYTICS COMMITTEE MEMBER

Sep. 2017 - Present

- · Helped teach and promote knowledge of data science through workshops on common industry technologies such as Git, SQL
- Participated in data science projects for company consulting such as Nommery

Youth Service Council Southwest Texas

VICE CHAIR

Aug. 2015 - Jun. 2017

- Youth Service Council helps govern South Texas region high school and college Red Cross clubs
- Arranged the Leadership Development Conference which helped over 200 members from across Texas socialize and develop leadership skills

### Honors & Awards \_

**US Physics Team**, Gold Medal on US Physics Olympiad **High Honors**, Top 50 on US National Chemistry Olympiad

Jun. 2017

May 2016

Skills & Interests

Languages- Python (Proficient), Java (Proficient), C++ (Familiar), SQL (Familiar), JavaScript (Familiar), HTML5/CSS3 (Familiar)

**Tools & Packages-** Bash, LaTeX, Git, Jupyter Notebook, NumPy, Pandas, Scikit-Learn **Professional Interests** Data Science, Machine Learning, Cryptocurrency, Scientifc Programming