

# Edward Cen

✉ edwardcen@berkeley.edu | 🏠 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: Data Structures and Algorithms, Linear Algebra, Data Science
- GPA: 4.0, Dean's High Honors List, Kraft Award

### 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

### Two Sigma Investments

Houston TX

INCOMING SOFTWARE ENGINEERING INTERN

Starting May 2018

### Nommery

Berkeley, CA

DATA ANALYTICS INTERN

Sep. 2017 – Dec. 2017

- 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

## Projects

### Halite II AI Challenge

- Designed heuristic-based resource allocation algorithms to ensure a distribution of ships which minimized threats and maximized mining potential
- Implemented efficient algorithm for multi-agent pathfinding to avoid collisions which reduced pathfinding runtime by over 50%
- Top 5% of all competitors, 1st Place Winner at Berkeley Halite Hackathon

### 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

### 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

### 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

Jun. 2017

High Honors, Top 50 on US National Chemistry Olympiad

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, React.js, Node.js & Express.js

**Professional Interests** Data Science, Machine Learning, Cryptocurrency, Scientific Programming