# **Charles Young**

#### **WORK EXPERIENCE**

West Big Data Hub

June 2022 - Present

Data Science Intern

San Diego, CA

- Responsible for designing and developing the organization repository website from the ground up.
- Developed frontend in React and backend in Django, using a test-driven development workflow
- Developed and managed ETL pipeline for user-uploaded repositories
- Gained significant experience in Git, Selenium testing, and Javascript during the development process

### Mathnasium of Milpitas

September 2018 - May 2019

Mathnasium Instructor

Milpitas, CA

- Personally tutored over 30 students in various subjects of mathematics up to univariate calculus
- Periodically assessed student proficiencies and developed tailored learning plans based on the results

# Gyrfalcon Technology Inc.

June 2018 - September 2018

Machine Learning Intern

Milpitas, CA

- Proofread and revised multiple company patent applications prior to submission
- Trained several convolutional neural networks for inference testing (Jupyter, Python, TensorFlow)

# **PROJECTS**

# Randomness analysis of CS Crash

- Used paired t-test to find 10% house edge in gambling minigame CS Crash
- Scraped over 3 million data entries from online website using Selenium
- Utilized matplotlib and seaborn for data visualization

#### Super Auto Pets AI

• Developing AI to play the game Super Auto Pets (Evolutionary Strategy, Python)

#### Envirosense

- Developed environment monitoring sensor system (Firebase cloud storage, Android Studio)
- Won 3rd-place in the Northrop Grumman Challenge

#### RELEVENT COURSEWORK

- Real Analysis I, II Math 140A + Math 140B
- Linear and Nonlinear Optimization Math 171A + Math 171B
- Statistical Methods and Enumerative Combinatorics Math 183 + Math 184
- Hidden Data in Random Matrices Math 182

# **EDUCATION**

## University of California San Diego

June 2023

B.S. in Mathematics – Emphasis in Computer Science GPA: 3.55

La Jolla, CA

**SKILLS & INTERESTS** 

# ■ **Programming Languages:** Python (Fluent), C++ (Proficient), SQL (Proficient), Java (Proficient)

• Skills: MATLAB (Proficient), Test-driven Development, Googling, Using Stackoverflow, Mandarin (Fluent)