# **Ethan Chiang**

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#### **EDUCATION**

# **University of Southern California**

May 2026

Master of Science in Computer Science

**UC Berkeley** Aug 2024 GPA: 3.68/4.0

Bachelor of Arts in Cognitive Science, Minor in Computer Science

Relevant Coursework: Data Structures and Algorithms, Machine Structures, Computational Models of Cognition, Artificial Intelligence, User Interfaces Design and Development, Programming Systems Design, Database Systems

Distinctions: Dean's List-College of Letters & Science, Honors to Date - Dec 2020, May 2021

#### **SKILLS**

**Programming:** Python, Java, C++, JavaScript, HTML, CSS, SQL, Assembly

Tools and Frameworks: Scikit-learn, PyTorch, Tensorflow, MS suite, Pandas, Git/Github, Linux, Numpy, MatPlotLib, Databases (relational & non-relational), Grafana, Chronograf, pgAdmin, psycopg2, Figma

#### WORK EXPERIENCE

Cohu Inc. | Software Engineering Intern

May 2023 - May 2024

- Implemented reusable backend and GUI components in C++ for MATRiX equipment software, allowing customers to perform diagnostics and extract data, boosting yields for 1,000+ machines installed worldwide
- Developed a dashboard in **SQL** and **Grafana** for real-time equipment monitoring across 25+ customer factories, enabling operators to track key performance metrics
- Built an in-house application in **Python** leveraging **Scikit-learn** to construct ML models of machine behavior and downtimes, delivering predictive insights for product performances
- Curated and prepared 30+ datasets using **SQL** with **Chronograf** and **InfluxDB** and conducted model performance evaluations for alternative AI/ML products, accelerating the research and market analysis timeline by 50%
- Actively participated in Agile development processes, including daily standups, planning sessions, code reviews, and kanban tracking

Ismeca Europe Semiconductor SA | Machine Learning Intern

May 2022 - July 2022

- Developed a Python data pipeline with PostgreSQL and pgAdmin to perform ETL processes on equipment data to support the research and development of a new ML product
- Provided 100% of insights on temperature behavior of a major Ismeca product through data analysis and modeling utilizing pandas, Scikit-Learn, and Matplotlib
- Delivered a comprehensive analysis and report of findings that drove the ML project team's subsequent objectives

# University of California, Berkeley | Teaching Assistant and Reader

Jan 2022 - May 2023

- Hosted office hours and assisted in class activities including discussion sections, ensuring student success
- Participated in weekly staff meetings, communicated feedback on current course material and quiz/exam questions

## **PROJECTS**

#### **High-fidelity Web Application Prototype**

- Designed and implemented a responsive, user-matching interface for a web-based social application using JavaScript, HTML, and CSS, improving user experience and functionality
- Leveraged GPT-4 LLM using open-source web platform **rea.gent** to power various services, enabling smart user matching capabilities, and event/venue recommendations based on user inputs

## **World Exploration Game**

Developed a 2D tile-based world exploration game in **Java** with a pseudo-random world generation algorithm, creating dynamic and unique maps for enhanced player experience