Ethan Chang

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EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY   Berkeley, CA | **August 2022 - May 2026**

Bachelor's of Art in Data Science & Minor in Computer Science

Relevant Coursework: Principles and Techniques of Data Science, Discrete Mathematics & Probability Theory, Linear Algebra & Differential Equations, Data Structures, Structure & Interpretation of Computer Programs

RELEVANT EXPERIENCE

Berkeley Discovery | *Database Assistant*   **February 2024 - Present**
- Analyzed academic/professional listings for high-priority posts and updated the database with weekly opportunities for over **6500+** concurrent users, boosting overall database activity by **50%.**
- Routinely manage **1200+** active listings and identify pain points on data infrastructure quality to improve the Discovery user interface for future system modifications and design updates.

Innovative Design at Berkeley | *Frontend Developer & Web Designer*   **September 2023 - May 2024**
- Designed mock-up graphic **UX** redesigns of the Berkeley Undergraduate website and designed a mobile application version, prioritizing intuitive and optimal user interfaces.
- Leveraged **HTML** and **CSS** through a **React.js** framework to translate team-based high fidelity designs into functional and aesthetic web pages for the client.

Taiwanese American Student Association | *Web Officer*   **December 2022 - December 2023**
- Debugged **Linux** server issues and routinely cleaned/managed existing website files through database management.
- Programmed interactive website features and maintained website content using HTML, CSS, and **JavaScript/jQuery**.
- Monitored website traffic and user analytics to drive decision-making and functionality to match the organization's focus.

PROJECTS

Outreach Effectiveness Data Analysis | *Berkeley Discovery*   **July 2024 - August 2024**
- Employed data functions via **Pandas** in JupyterLab to analyze user login frequency and activity from database datasets informing data-driven decisions about the initiative's outreach funding allocation and event effectiveness.
- Used EDA through **data modeling** and quantitative insights to identify key trends/patterns between time periods, visualizing a near **200%** boost in user-database activity from in-person initiatives.
- Standardized a methodology to perform data analysis for admin usage concerning future outreach effort effectiveness.

Email-Type Binary Classifier   **April 2024**
- Modeled **feature engineering** with labeled text datasets and utilized the **Sklearn** library to process data and construct a classifier model to distinguish spam and non-spam emails while minimizing overfitting.
- Created a binary classifier algorithm for emails by training logistic regression models, comparing heatmap correlations and validating prediction value accuracy, reaching a near **86%** final training accuracy.

2D-World Interactive Game   **April 2023**
- Programmed a 2D tile-based world engine to generate an interactive game using **Java** data algorithms and packages.
- Integrated an engaging **user interface** with player-game functionality and unique game features including NPC/item encounters with combat menus, level progression, and user health/toolbar tracking.

LEADERSHIP

Ighota! Virtual Learning | *Vice President*   **June 2021 - July 2024**
- Researched STEM curriculum for lab worksheets and designed 15+ graphic review sheets for **600+** Nigerian students.
- Coordinated with the Girl's Secondary School in Nigeria, providing **20+** secondary schools with our STEM resources.
- Outreached to several Nigerian institutions, garnering 8 active educators to record STEM material for our students.

Taiwanese American Student Association | *Internal Vice President*   **December 2023 - May 2024**
- Successfully organized 5 general events for **100+** students, promoting an environment to learn about Taiwanese culture.
- Organized the semesterly retreat, weekly team socials and meetings, and bonding activities for all cabinet members.
- Actively fostered camaraderie, cabinet bonding, and strong collaboration among **30+** cabinet members across **7** teams.

SKILLS & INTERESTS

- **Skills & Knowledge**: Python, Java, SQL, HTML, CSS, JavaScript, jQuery, Pandas, Sklearn, React.js, Figma
- **Interests**: AI/ML, Data Science/Analytics, Business, Social Good, Web/Graphic Design, Sketching, Photography