ISABEL CHEN

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EDUCATION

UNIVERSITY OF CALIFORNIA, BERKELEY **May 2027 (Expected)**

B.A. Economics, B.A. Data Science (Economics Emphasis), Minor in Public Policy GPA: 3.7/4.0

RELEVANT COURSEWORK: Econometrics, Data Structures, Principles and Techniques of Data Science, Computational Structures in Data Science, Data Science for Economists, Microeconomics, Macroeconomics, Linear Algebra and Differential Equations, Ethics in Data

EXPERIENCES

UC BERKELEY, DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS **Berkeley, CA**

Research Assistant Aug 2024 - Present

- Compiled, cleaned, and processed 600,000+ light intensity data entries for each MMDA in Ghana for regression and spatial analysis
- Manage data integrity by handling missing values, normalizing survey data, encoding categorical variables, and applying regular expressions to standardize formats across datasets, significantly improving preprocessing efficiency and data quality by over 40%
- Built a machine learning model using Scikit-Learn to predict CPI after transportation subsidies, contributing to policy evaluation

UC BERKELEY, DEPARTMENT OF ECONOMICS **Berkeley, CA**

Head Teaching Assistant - Econ 1: Introduction to Economics Aug 2024 - Present

- Design and facilitate 4 exam review sessions for over 200 students; consistently received above-average ratings for teaching effectiveness
- Lead weekly team meetings with other teaching assistants to discuss exam content and student progress to improve teaching methods

CHEM CONSULTING LLC **Gaithersburg, MD**

Data Analyst Intern May 2025 - Aug 2025

- Conducted A/B testing and performed market and pricing analysis to align with industry trends and drive customer acquisition
- Optimized data workflows for 500,000+ employment records using SQL, improving data accessibility and processing efficiency
- Deployed predictive models to forecast market demand, resulting in reduced investment risk and more data-driven strategic decisions

PROJECTS

FORMULA ANALYTICS | LINK **Jun 2025 - Aug 2025**

- Developed a comprehensive analytics platform analyzing several F1 championships through advanced statistical modeling, machine learning algorithms, processing race position and performance to achieve 91% predictive accuracy in race outcomes and the 2025 season results
- Applied advanced data science techniques including MCMC algorithms, Bayesian inference, simulations, and clustering to quantify driver performance patterns and championship probability distributions, with findings presented through interactive dashboards

EVENTURE | LINK **May 2025 - Jul 2025**

- Engineered a full-stack event management website using JavaScript, HTML, and CSS with dynamic DOM manipulation, local storage data persistence, automated budget allocation tracking, RSVP coordination, and modal-based forms with client-side validation

CUSTOMER CHURN PREDICTION | LINK **Mar 2025 - Apr 2025**

- Implemented classification and machine learning models to predict customer churn and achieved above 80% prediction accuracy
- Constructed a survival analysis model to visualize when customers typically churn and the company's survival and exit in the market
- Visualized correlations in heatmaps and charts between key variables, providing insights into consumer behavior and feature selection

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

BERKELEY ECONOMIC REVIEW **Berkeley, CA**

Internal Vice President Jan 2025 – Present

- Strengthened industry connections by organizing an office tour with Cornerstone Research and coffee chats with the economic consultants
- Assembled a speaker panel featuring all leading economic professors, researchers, and experts specializing in space commercialization

Peer Reviewer, Senior Staff Writer Jan 2024 - Jan 2025

- Evaluated 20+ research paper submissions for the journal by assessing research quality, methodological rigor, and potential ethical concerns

THE DAILY CALIFORNIAN **Berkeley, CA**

Data Developer Jan 2025 - Present

- Analyzed 8 years of UC Berkeley voting data and referendum records to identify correlations between fee referendums and voter turnout

TECHNICAL SKILLS

PROGRAMMING LANGUAGES: Python, SQL, R, JavaScript, Java, HTML, CSS

LIBRARIES & FRAMEWORKS: Pandas, NumPy, Matplotlib, Seaborn, Scikit-Learn, XGBoost, React, Tailwind CSS, Tidyverse

SOFTWARE: Microsoft Office Suite (Excel, PowerPoint, Word), Tableau, VSCode, Jupyter Notebook, Stata, PowerBI, AWS, MySQL