

# Samuel Elijah Edwards

San Francisco Bay Area | 209-290-7569 | [s\\_edwards@berkeley.edu](mailto:s_edwards@berkeley.edu) | <https://samuel-elijah-edwards.github.io/>

## EDUCATION

### University of California, Berkeley

Expected Graduation: May 2024

B.A. Data Science | *College of Letters and Sciences*

**Relevant Coursework:** Data Structures, Data Mining and Analytics, Causal Inferences and Decisions, Principles and Techniques of Data Science, Probability and Mathematical Statistics in Data Science, Linear Algebra and Differential Equations, Advanced Business Analytics, Econometrics, Structure and Interpretation of Computer Programs

## PROFESSIONAL EXPERIENCE

### Student Library Work Leader | University of California, Berkeley | Berkeley, CA

*Jun 2022 - Present*

- Managed circulation of over 40 million books using a library management system and communicating with universities across the country.
- Assisted an average of 50 patrons daily with questions and concerns about library operations and providing solutions to patrons.
- Led and directed staff organization and managed task delegation to ensure efficient workflow operations.

### Primary Education STEM Instructor | University of California, Berkeley | Berkeley, CA

*May 2022 – Sept 2022*

- Developed personalized educational plans to address each student's unique learning needs, goals, and challenges.
- Tracked students' progress, identified areas of improvement and implemented strategies to address academic weaknesses.
- Participated in professional development workshops and training sessions to stay updated on the latest teaching techniques and STEM advancements.

### Founder/Instructor | Self-Employed Mathematics Tutoring Services | Stockton, CA

*Nov 2018 - Jan 2019*

- Instructed adult students in high-school-level mathematics and developed educational plans to prepare them to take the GED Exam.
- Coordinated time and location scheduling with clients and ensured participation through phone call reminders and daily e-mails.
- Administered practice GED exams to students bi-weekly and analyzed exam performance to better support academic needs.

## LEADERSHIP & EXTRACURRICULARS

### Simulations Data Analyst | Space Technologies and Rocketry (STAR) | Berkeley, CA

*Sept 2023 - Present*

- Gathered data from rocket navigational systems and telemetry, followed by data processing for analysis and visualization.
- Identified significant data trends that informed adjustments and optimizations in rocket flight trajectories, resulting in a 30% increase in flight altitude.

### Data Analyst | Collatz Conjecture – UC Berkeley Mathematics Department | Berkeley, CA

*Mar 2022 - Present*

- Collaborated on research involving the Collatz Conjecture, contributing data-driven insights to the exploration and potential resolution of this longstanding mathematical problem.
- Developed mathematical models using data analysis techniques to enhance the accuracy of a machine learning growth predictor.

## PROJECTS

### Stock Valuation Prediction Model

- Utilized Google Finance API to access historical market data for all publicly traded companies.
- Engineered a predictive machine learning model that achieved a 57% accuracy rate in forecasting stock prices.
- Enhanced forecast accuracy by 10% through the integration of news data for the detection of significant mergers and acquisitions.

### Autocorrected Typing Software

- Developed an autocorrecting algorithm for a typing software in Python.
- Designed typing games and words-per-minute tests, drawing inspiration from the popular typing game "TypeRacer."
- Enabled multiplayer functionality by establishing connections to a dedicated server, facilitating multiplayer typing games with friends.

### Exo-Planet Classifier

- Engineered an autocorrect algorithm within a typing software using Python.
- Optimized exo-planet classification by conducting a comparative analysis of two distinct classification algorithms.
- Achieved an 86% accuracy rate in predicting exo-planet types according to their sizes.

### Business Operations Analysis

- Performed data pre-processing and cleaning, ensuring the effective segmentation of critical product distribution information.
- Conducted extensive exploratory data analysis, focusing on identifying and understanding key trends related to demand fluctuations and seasonality on a monthly basis.
- Leveraged Tableau to design an informative and user-friendly dashboard that visually highlighted the most significant trends, enabling data-driven decision-making.

## SKILLS & INTERESTS

**Skills:** Python, R, SQL, Machine Learning, Data Analysis, Statistical Modelling, Data Mining, A/B Testing, Financial Modeling, Causal Inference, Tableau, Market Research, Amazon Web Services, Excel

**Interests:** Football, R&B, Video Games, Biking, Philosophy, Greek Mythology, Music Festivals, Sudoku, Spike ball