COLLIN DAVIS

2728 Channing Way, Berkeley, CA | +1 (760) 697 2906 | collindavis@berkeley.edu | LinkedIn: Collin Davis

EDUCATION

University of California, Berkeley, CA, US

Class of 2025

B.A. Computer Science, B.A. Data Science

Relevant Coursework: Artificial Intelligence, Database Systems, Internet Architecture, Principles and Techniques of Data Science, Computer Architecture, Software Engineering

Experience

Advanced Al Coding Trainer, Outlier.ai (Scale.ai)

06/2024-Present

- Training LLMs to become proficient coders, involving generation of working code for complex analysis in languages such as Python, Java, SQL, and JavaScript.
- Extended model capabilities to interface with additional dataset sources for statistical analysis using pandas and Google Suite APIs.
- Analyzing and correcting model output across key dimensions, including accuracy, efficiency, and conciseness.

Sports Analytics Group at Berkeley, Berkeley, CA

08/2022-05/2025

- Developed a statistical model to quantify the trade value of the top 100 MLB prospects for the Tampa Bay Rays, using historical Wins-Above-Replacement (WAR) data.
- Analyzed ROI on NIL deals and EPA per play for sports betting startups, improving in-game betting odds accuracy by 24%.
- Adjusted pre-game individual lines based on opposing teams' statistics, enhancing betting strategy effectiveness.

Accelerate Equity https://accelerateequity.net/ Berkeley, CA

12/2022-05/2023

- Co-led a research project to generate and visualize statistical analyses on the inequity of opportunities between male and female sports according to Title IX regulations.
- Ingested and cleaned EADA data using Python and built interactive browser-based visualizations with Tableau to show the discrepancies in equity between male and female sports.

Programming Projects

Cryptographically Verifiable Video App & Database

06/2025-Present

- Developed a camera and screen recording app with a tamper-proof watermark to certify authenticity.
- Integrated OmniAuth authentication for secure video submissions to a hosted API.
- Embedded unique video IDs server-side, enabling public lookup to detect manipulation or Al-generated content.
- Applied cryptographic hashing and signing to preserve video integrity and store results in an immutable database for public verification.

MLB/Milb Player Comparison Tool https://www.collindavis.online

02/2025

- Designed a website with Ruby on Rails to showcase statistical trends between MiLB/MLB players, which included fetching data from an API using the Node.js package
- Applied Bayesian GLMs to find patterns between player profiles and biomechanics relative to player success and used those patterns to find the counterparts of prospects to predict their player profile.
- Allowed users to make their own custom comparisons and used Ajax for dynamic interactivity.

Easy Website Editor

03/202

- Engineered a real-time website editor with bidirectional synchronization to eliminate manual checking, reducing editing time by 98.57%.
- Built a drag-and-drop interface with React, enabling users to move, resize, and restyle containers while instantly updating the DOM.
- Optimized performance using efficient DOM manipulation and minimal re-renders, ensuring smooth operation for complex websites.

Music Genre Classification Neural Net

11/2024

• Trained a CNN using TensorFlow to classify song genres with a 9% improvement over the baseline by leveraging spectrogram feature engineering and ADAM optimization.

SKILLS & ADDITIONAL INFORMATION

Programming Languages: Python (Advanced), Java (Advanced), R (Advanced), Ruby (Advanced), Golang (Advanced), C (Proficient), JavaScript (Proficient)

Web Development: HTML, CSS, Ruby on Rails, AWS, Tableau, Docker

Databases: SQL, PostgreSQL (Relational), MongoDB (Non-Relational), NoSQL (Non-Relational) **Libraries:** TensorFlow, PyTorch, Pandas, Node.js, React.js, Rails, Flask, Scikit-learn, Express.js, Ajax.js