MINGGANG LI

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EDUCATION

University of California, Berkeley

Aug 2024 - Present

 $\operatorname{B.S.}$ in Data Science and $\operatorname{B.A.}$ in Applied Mathematics; minor in Computer Science

GPA: 3.9/4.0 Coursework:

• CS 61A: Structure and Interpretation of Computer Programs

• CS 61B: Data Structures

• CS 61C: Great Ideas of Computer Architecture (Machine Structures)

• CS 70: Discrete Mathematics and Probability Theory

• DATA C100: Principles & Techniques of Data Science

• MATH 53: Multivariable Calculus

• MATH 56: Linear Algebra

• STAT 20: Introduction to Probability and Statistics

St. Mark's School, Southborough, MA — High School Diploma

Sep 2020 - Jun 2024

TECHNICAL SKILLS

Programming LanguagesJava, Python, C/C++, SQL, JavaScript/HTML/CSSWeb DevelopmentReact, Node.js, Express, Django, SpringBootBig Data & CloudHadoop, Spark, Docker, K8s, AWS, GCPDatabasesMySQL, MongoDB, Redis, Elasticsearch

Machine Learning PyTorch, TensorFlow, Scikit-Learn, XGBoost, Pandas

Tools Git, Unix/Linux, OpenCV, ChatGPT API

EXPERIENCE

Berkeley Operations and Behavioral Analytics Lab, Haas School of Business Undergraduate Researcher

May 2025 - Present

Berkeley, CA

- · Conducting interdisciplinary research at the intersection of AI and behavioral economics, advised by Professor Park Sinchaisri
- · Developing experimental platform to study **human-AI collaboration patterns** and decision-making dynamics in educational contexts
- · Built custom ChatGPT interface with behavioral tracking to analyze user interactions across four interaction paradigms: content generation, information retrieval, creative jumpstarting, and iterative refinement
- · Implementing controlled experiments examining **trust and reliance** when users interact with multiple AI systems with varying expertise levels
- · Designing effort-based tasks to measure **cognitive offloading behaviors** and understand when humans choose to delegate vs. complete tasks independently

Shenzhen TSAF Tech Co. Ltd

Summer 2024

AI Research Intern

Shenzhen, China

- · Conducted comprehensive research on **voice-driven 2D/3D facial animation algorithms** for educational applications, analyzing 5+ state-of-the-art methods including audio2face technologies
- · Evaluated algorithm performance for classroom scenarios, focusing on **real-time facial generation quality** and system responsiveness for interactive learning environments
- · Investigated potential applications in **virtual teaching assistants** and educational content delivery, assessing feasibility for deployment in online education platforms
- · Delivered technical research report with recommendations for implementing AI-driven facial animation in educational technology solutions

Platinum Division, USACO (United States of America Computing Olympiad)

Jan 2023

PROJECTS

Bridge AI: Community Service Locator

Jun 2025

- **Description:** AI-powered web application that helps individuals locate essential community services like food banks, shelters, and healthcare facilities. Features intelligent service discovery, interactive mapping, and AI chatbot for personalized recommendations.
- · Tools: React, Node.js, Google Maps API, Anthropic Claude API, Tailwind CSS, Express

Bitcoin Price Forecasting with Machine Learning

Spring 2025

- **Description:** Machine learning project using ARIMA and XGBoost models to forecast Bitcoin prices based on historical data and market indicators.
- · Tools: Python, ARIMA (Python), XGBoost, Pandas, NumPy, Scikit-learn

CS61B Build-Your-Own-World

Spring 2025

- · **Description:** 2D tile-based exploration game with procedurally generated worlds, line-of-sight mechanics, and coin collection gameplay. Implements Kruskal's MST for room connectivity, ray casting for vision systems, and Union-Find data structures.
- · Tools: Java 17, Princeton StdDraw, Kruskal's MST Algorithm, Ray Casting, Union-Find