Kelly Ma

626-610-5190 | kellyma.dev@gmail.com | linkedin.com/in/kellyma626 | github.com/kellyma626 | kellyma626.github.io |

Education

University of California, Riverside September 2023 - June 2027
Bachelor of Science in Computer Science *Riverside, California*
Relevant Coursework: Data Structures & Algorithms, Software Design, Linear Algebra, Probability, Statistics

Technical Skills

Languages: Python, C++, TypeScript/JavaScript, HTML/CSS, SQL
Frameworks: React, React Native, Next.js, Node.js, Expo, Tailwind/NativeWind
Libraries: NumPy, Pandas, scikit-learn, Matplotlib, Seaborn, Keras, HuggingFace, PyTorch, Tensorflow
Tools: Git, GitHub, GitHub Actions, Supabase, PostgreSQL, AWS, Figma

Experience

Machine Learning Fellow August 2025 - Present
Fitch Group, Inc. *Remote*
- Built ML models (Logistic Regression, Random Forests, XGBoost) on accounting time-series data from 8,000+ U.S. companies (1999–2018) for corporate bankruptcy prediction, supporting Fitch in credit risk assessment.
- Performed feature engineering and handled class imbalance, optimizing AUC-ROC, F1, and Type II error metrics.
- Collaborated weekly with teammates and Fitch stakeholders to translate findings into actionable insights.

L'SPACE Lead Engineer August 2025 - Present
National Aeronautics and Space Administration (NASA) *Remote*
- Researched AI and control methods (PID, MPC-lite, reinforcement learning) for adaptive moisture and nutrient management in microgravity plant systems, informing a competitive $10K NASA seed funding proposal.
- Authored proposal content with 5 subject matter experts to evaluate feasibility and align with NASA priorities.

Artificial Intelligence Fellow May 2025 - Present
Break Through Tech AI at Cornell Tech *Remote*
- Selected from 4,000+ applicants for a year-long AI fellowship applying CRISP-DM to real-world ML projects.
- Developed foundational AI/ML skills through hands-on projects with neural networks, sentiment analysis, and industry tools, earning Machine Learning Foundations certification from Cornell University.

Undergraduate Research Assistant October 2024 - Present
University of California, Riverside (UCR) *Riverside, California*
- Implemented models (Random Forests, SVM, XGBoost, MLP, Ensemble Voter) to classify 3,360 samples of student vs AI-generated code using TF-IDF and CodeBERT embeddings, supporting integrity in early CS education.
- Collaborated weekly with faculty and Ph.D. mentors to refine experimental methodology and interpret findings.

Projects

Cutie Mood - Mobile Mental Health App github.com/kellyma626/cutieMood
React Native, Expo, TypeScript, NativeWind, Supabase, GitHub, Figma *July 2025 - August 2025*
- Led project vision and technical execution, architecting features including mood tracking, journaling, and chatbot.
- Implemented Supabase flows for async mood entry creation and retrieval, managing 120+ entries seamlessly.
- Designed all 5 screens, creating a cohesive, playful mobile UI with custom mood-to-image/color mappings.

Cave Adventure - Terminal-Based C++ Game github.com/kellyma626/rpg-cave-game
C++, GitHub, GitHub Actions, GoogleTest *October 2024 - December 2024*
- Engineered abstract Item classes and a vector-based inventory with polymorphism and dynamic memory.
- Ensured code quality via 20+ unit tests with GoogleTest, CI using GitHub Actions, and debugging/profiling tools.

Association for Computing Machinery - Club Websites github.com/acm-ucr/winc-website
React, Next.js, Tailwind CSS, GitHub *October 2023 - March 2024*
- Constructed responsive websites for 2 student organizations, improving access to club events for 100+ members.
- Identified recurring production inconsistencies from hardcoded event data; developed reusable components to automate rendering, removed 250+ lines of redundant code, and initiated a broader cleanup across the codebase.
- Coordinated with 9 developers in weekly Agile scrums to prioritize features and enhance mobile responsiveness.