Andrew Krikorian, Software Engineer

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EMPLOYMENT HISTORY

Jun 2024 — Present

Undergraduate Researcher, Fokwa Group, UCR — Riverside

- Developing a custom machine learning model to predict magnetization properties of inorganic solid-state compounds
- Implementing advanced algorithms for materials property estimation and analysis
- Applying AI/ML techniques to accelerate materials discovery and characterization
- Contributing to computational materials science research through model development

Jan 2023 — Jul 2024

Undergraduate Researcher, Gallardo Group, UCR — Riverside

- Led a research team investigating feed-forward neural networks for algebraic geometry applications
- Developed algorithms for analyzing wall-chamber decomposition in plane curve parameterization
- Collaborated with mathematics and computer science departments on novel ML applications

Jun 2023 — Sep 2023

Software Engineer Intern, Persistent Systems — Santa Clara

- Architected and implemented a SQL query generation GUI using Python, streamlining database operations
- Engineered an automated synthetic test data generator, significantly reducing manual testing efforts
- Implemented robust data validation workflows using Great Expectations, ensuring data quality and reliability
- Developed an intuitive Streamlit-based GUI for executive analytics, enhancing data accessibility

Jun 2022 — Sep 2022

Software Engineer Intern, AI/ML, Silicon Valley Bank — Palo Alto

- Developed a machine learning model for mortgage business forecasting using TensorFlow
- Engineered a Django API integration with Tableau for automated weekly reporting
- Reduced analysis workflow from 16-20 hours to near-zero through automation
- Implemented data pipeline integrations with MongoDB and internal servers

EDUCATION

Aug 2020 — Dec 2024

B.S. in Data Science, AI/ML, University of California, Riverside — Riverside

- Graduated with Latin Honors, Cum Laude

NOTABLE PROJECTS

Skinvue | 1st Place Hackathon Winner

- Engineered an AI-powered skin cancer detection system using TensorFlow and CNNs
- Trained models on Harvard's HAM10000 dataset achieving 98% accuracy
- Built responsive React/Tailwind frontend for image submission and analysis tracking

Picturelock | Social Media for Film Enthusiasts

- Architected full-stack mobile application using React Native, NativeWind, and Supabase
- Implemented real-time notification system and recommendation engine using AWS EC2
- Achieved 100% uptime while serving 100+ beta users

Pathfinder | 3D Printed Autonomous Vehicle

- Developed embedded C++ control systems for autonomous navigation using Raspberry Pi
- Implemented real-time object detection using OpenCV with 1fps processing
- Designed custom PyTorch-based decision-making architecture for low-latency control

SKILLS

C++	React
Python	SQL
Java	Git
JavaScript	AWS