

# ANDREW KRIKORIAN

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## WORK EXPERIENCE:

### Persistent Systems | Software Engineer Intern

Jun 2023 to Sep 2023

- Created a SQL query generation tool to access data from Persistent's server using Python
- Developed a tool for generating synthetic test data from existing samples using Python
- Utilized the Great Expectations library for robust data validation procedures using their CLI tool
- With the combination of all these tools, I accelerated testing cycles and allowed for in-depth analysis for executives with an easy-to-use Streamlit GUI

### Silicon Valley Bank | Data Science Intern (AI/ML)

Jun 2022 to Aug 2022

- Created a prediction model/tool for mortgage business forecasts using Tensorflow and data from SVB's server as well as their MongoDB database
- Built an API using Django to connect the model to a tableau notebook for automated monthly reports reducing analysis time from 16-20 hours a week to an instant report automatically generated every Monday morning

## RESEARCH:

### UCR Research Study | Machine Learning Combinatorial Structures

Jan 2023 - Jan 2024

Led a team of programmers and data scientists studying the use of neural networks and training one to learn data from algebraic geometry, specifically the wall-chamber decomposition associated with particular spaces parameterizing plane curves and a line.

## HACKATHONS:

### Skinvue | Skin Lesion Classifier and Tracker | 1st Place

[Github.com/Andykr1k/Skinvue](https://github.com/Andykr1k/Skinvue)

- Personalized AI-powered application for detecting potentially cancerous moles using image recognition.
- Trained a convolutional neural network to analyze mole characteristics such as dimensions, color, and growth using Tensorflow and utilized Harvard Dataverse MNIST HAM10000 dataset.
- Built a responsive web application to submit images, store results, and track mole changes over time with React and Tailwind.

## RELEVANT PROJECTS:

### Picturelock | Social Media + Recommender for Films

<https://testflight.apple.com/join/Ed1gAjRS>

- Developed a social media platform leveraging React Native, NativeWind, Supabase, and Expo.
- Engineered a scalable notification service and recommendation engine, hosted on AWS EC2, utilizing Python, NumPy, Pandas, and WebSockets for real-time interaction.
- Achieved 100% uptime while actively supporting a beta-testing cohort of 100 users.

### Pathfinder | Self-Driving Car

[Github.com/Andykr1k/Pathfinder](https://github.com/Andykr1k/Pathfinder)

- Designed and built an autonomous vehicle using a Raspberry Pi, L298N motor drivers, TT motors, and omnidirectional wheels.
- Developed custom motor control algorithms in C++, coupled with an object detection system powered by OpenCV.
- Optimized decision-making efficiency with a custom data structure in PyTorch, enabling low-latency processing at 1 frame per second.

## EDUCATION

### University of California, Riverside

Aug 2020 to Dec 2024

B.S. in Data Science Specialized in AI/ML

Cum Laude

## SKILLS:

**Languages/Frameworks/Libraries:** Tensorflow, PyTorch, Python, Java, Javascript, C++, Go, R, Hadoop, React, Next.js, Streamlit, Django, Flask, TailwindCSS, Redux, SciPy, Numpy, and Pandas

**Tools/Databases:** Spark, Maven, AWS, Netlify, Vercel, AsterixDB, Pinecone, MySQL, Firebase, Supabase, Redis, and MongoDB