

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. There is currently limited knowledge about patterns within this type of data, so we are investigating if a neural network can accurately predict this particular geometric information.

RELEVANT PROJECTS:

Pathfinder | Self-Driving Car

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

- Assembled a self driving car using Raspberry Pi, L298N Drivers, TT Motors, and Omnidirectional Wheels
- Developed a specialized motor control system programmed in C++ with an Object Detection model using OpenCV2
- Programmed a custom data structure for a more energy efficient PyTorch decision making model allowing us to use 1 frame per second

CourseBucket | UCR Course Repository and Scheduler

[Coursebucket.app](https://coursebucket.app)

- Built a UCR course repository and class scheduler using React, Tailwind, Redux, Supabase and Vercel
- Programmed a course scraper using BS4 which lives on an AWS EC2 instance with a cronjob config to run automatically and update the course database

QuantumDB | Google Drive React Clone

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

- Built a fully featured web-based document data store for large volumes of data using React, C++ and CROW (used for creating API endpoints in C++)
- Configured an AWS EC2 Instance to hold our data as well as our server

EDUCATION

University of California, Riverside

Aug 2020 to Dec 2024

B.S. in Data Science Specialized in AI/ML
GPA - 3.8

SKILLS:

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

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