

Shayan Ghafoori

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EDUCATION

University of California, Los Angeles (UCLA)

Los Angeles, CA

B.S. Mathematics of Computation (focus in Computer Science), Minor in Statistics

Sept 2019 – June 2023

Relevant Courses: OOP in C++, Computer Organization, Data Structures & Algorithms, Operating Systems, Programming Languages, Software Engineering, Optimization, Numerical Methods, Machine Learning

TECHNICAL SKILLS

Languages: C++, Python, JavaScript/TypeScript, CSS/HTML, R

Technologies: React.js, Tailwind CSS, Selenium, NumPy

Tools & Platforms: Git, Docker, Linux/Bash, CMake, Jira, Azure

EXPERIENCE

Software Engineer

Oct 2023 – Present

Raytheon Technologies

Santa Barbara, CA

- Developed embedded software (C++, Rust) within an agile scrum environment contributing to R&D projects
- Engineered a Python tool that matches 5.5K+ engineers to projects, saving millions in annual overhead costs
- Automated the training of an internal RAD Large Language Model built on Falcon40B and Mistral
- Implemented CI/CD pipelines and Docker containers to streamline deployment processes
- Built a C#/WPF GUI for hardware simulation and testing, enabling early fault detection and cost savings
- Created unit tests (Google Test) for hardware interactions and real-time performance in embedded systems

Software Engineer and Data Analyst

Sept 2022 – Oct 2023

WagerWire - Sports Betting Startup

Los Angeles, CA

- Built company website (React.js, TypeScript) resulting in 30K+ monthly visits and was featured on major sports media outlets including ESPN, Barstool, and Bleacher Report
- Integrated website with Sanity.io, allowing the media team to easily publish content through an intuitive GUI
- Engineered and refined a bet pricing algorithm from a basic application to a sophisticated, multivariate system by leveraging analysis of 22 years of sports betting data (Python, R)
- Analyzed data from 1K+ users to identify key performance indicators for the upgrade of mobile app

Software Engineer and Data Analyst Intern

June 2022 – Sept 2022

WagerWire - Sports Betting Startup

Los Angeles, CA

- Enhanced an MVP for app integration (React.js), leading to a referral system generating \$200-\$500 per new user
- Utilized Selenium (Python) to scrape and analyze 120K+ sports betting probabilities across six leagues
- Connected various sports odds APIs

PROJECTS

Tesla Stock Predictor | Python, R

April 2024 – June 2024

- Predictive algorithm developed via a maximum-likelihood approach to regression (considering Gaussian noise) and recursive feature elimination with 10-fold cross-validation

WagerWire.com | React.js, TypeScript, Tailwind CSS, Sanity.io

June 2022 – Oct 2023

- Website complementing the WagerWire mobile app that enables users to buy, sell, and trade sports bets
- Utilizes server-side operations to protect a proprietary bet valuation algorithm
- Enables sharing of user-customized graphs via dynamic, shareable links

BruinSports | MongoDB, Express, React.js, Node.js

March 2021 – June 2021

- Website for UCLA students to post and RSVP for pickup games

For more projects and details, check out shayan-ghaf.com#projects