

Shayan Ghafoori

702-337-7507 | ghafoorishayan@gmail.com | [linkedin.com/in/shayan-ghafoori](https://www.linkedin.com/in/shayan-ghafoori) | shayan-ghaf.com

EDUCATION

University of Arizona

Tucson, AZ

M.S. Machine Learning, Information Science

Jan 2024 – Present | **GPA: 4.0**

Relevant Courses: Machine Learning, Artificial Intelligence, Data Mining

University of California, Los Angeles (UCLA)

Los Angeles, CA

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

Sept 2019 – June 2023 | **GPA: 3.3**

Relevant Courses: OOP in C++/Python, 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

Tucson, AZ

- Programmed in Rust, C++, and Python for embedded systems in an agile scrum environment
- Accelerated training and development of an internal Retrieval Augmented Generation (RAD) Large Language Model (LLM) built on Falcon40B and Mistral by utilizing Python's Selenium
- Engineered a Python tool that connects 55K+ engineers with relevant skills to new programs, reducing resource overhead and enhancing project efficiency
- Implemented CI/CD pipelines and Docker containers to streamline deployment processes
- Created unit tests for real-time performance and hardware interactions in embedded systems using Google Test

Software Engineer and Data Analyst

Sept 2022 – Oct 2023

WagerWire (Sports Betting Startup)

Los Angeles, CA

- Developed a proprietary algorithm for valuing sports bets, concurrently creating intuitive GUIs for public use
- Spearheaded complete overhaul and development of website using React.js, Typescript, and Tailwind CSS, resulting in a ~1.8K% increase in average engagement time and 30K+ visits a month according to Google Analytics
- Crafted website's calculator and graph pages, empowering users to assess and visualize bet value fluctuations
- Developed community and home pages as go-to destinations for staying informed on all things WagerWire
- Engineered and refined bet pricing algorithm from a basic application to a sophisticated, multivariate system by leveraging analysis of 22 years of sports betting data using Python and R
- Analyzed data of 1K+ users to identify key performance indicators for development of in-app analytical dashboard

Software Engineer and Data Analyst Intern

June 2022 – Sept 2022

WagerWire (Sports Betting Startup)

Los Angeles, CA

- Enhanced an MVP for 3rd party app integration, resulting in successful pitches to sportsbooks and a referral system generating \$200-\$500 per new user using React.js, Typescript, and Tailwind CSS
- Utilized Selenium to scrape and analyze 120K+ sports betting probabilities across six leagues using Python
- Explored and connected various sports odds APIs, enabling real-time data aggregation and analysis

PROJECTS

Tesla Stock Predictor | Python, R

April 2024 – June 2024

- Predictive algorithm developed via an MLE approach to regression (considering Gaussian noise), z-score normalization, and recursive feature elimination with 10-fold cross-validation

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 more details about each project, check out shayan-ghaf.com/projects