

Saifullah Jailani



| saifullahjailani.com

Entry-level software engineer concentrated on the backend and full-stack software development. Proficient in algorithm development and optimization, UI/UX, web development and computer application, software testing, and cryptography.

PROFESSIONAL EXPERIENCE

KometX

Software Engineer Intern

December 2022 – July 2023

- Formulated new algorithms to predict the trends and shifts in the global financial market for portfolio precision and risk tolerance enhancements, and devised test strategies to efficiently test new software features.
- Utilized Python programming skills to import financial data from Yahoo Finance and Investing.com APIs.
- Retrieved and compiled historical data of the US30 index, ensuring accuracy and completeness of data sets.
- Utilized Selenium, Cucumber, JUnit, and Pytest to automate the tests.
- Prototyped the frontends in Figma and used UI/UX principles to finalize the designs.
- Designed and developed user interfaces to display the data sets in a visually appealing manner using BDD.
- Created web solutions by developing the front end using React and JavaScript, integrated with the Postgres database, and deployed with Heroku, and AWS.
- Optimized algorithms developed in Java and Python to enhance their time and space complexities.

EDUCATION

University of California, Berkeley

Berkeley, CA

Bachelor of Science in Electrical Engineering and Computer Science

December 2022

- Theory and Algorithms, Computer Security (malware, vulnerabilities, mitigations, and Cryptography), Algorithm Optimization, AI, Machine Learning, Operating Systems, and Databases
- Built a microcontroller-based voice-controlled car scripted in C and applied classification algorithms.
- Built a Git version control system clone from scratch using Java.
- Implemented process forking, multithreading, scheduling, stack/heap allocation, file directories, and file resizing of Linux-based operating using C.
- Implemented Storage Organizational Structure, Query Optimization, Queuing, ACID-compliant Query Engine with Optimized Query planner and concurrent querying support for a SQL-based database management system.
- Developed an AI agent that solves maze games and trains crawlers to walk using Python, and AI principles.
- Implemented routing and transport layers, addressing (routing, reliable delivery, congestion control, TCP, UDP, IP, DNS, and HTTP) tested on a router simulator using Python.
- Created a secure multi-user online file-sharing system using GO and cryptography principles.

PROJECTS

PIPEX | KometX

February 2023

- Designed an internal tool using React.js that presents data obtained from an API in a visually appealing manner. Utilized Spring Boot and Spring Security to establish secured RESTful APIs to serve this web page. Used Selenium, Cucumber, and JUnit to test the application in a behavior-driven development fashion

Representative Finder | UC Berkeley

December 2022

- Built a user-friendly Ruby on Rails website with Google Civic API and a custom API to dynamically list US representatives by location, enabled news attachment and search for representatives, integrated device gem for smooth Gmail/GitHub login, used selenium and cucumber to test, and deployed on Heroku.

ADDITIONAL SKILLS

- **Programming Languages:** Python, GO, Java, C, C++, JavaScript, TypeScript, Ruby, RISC-V, MATLAB, and R.
- **Database and Dev Tools:** GitHub, SQL, Postgres, NoSQL, Jupyter, VS-Code, IntelliJ, PyCharm, Figma, AWS, Azure, Heroku, and Netlify.
- **Libraries:** PyQt, Tkinter, Pygame, NumPy, ScikitLearn, SciPy, and Pandas.,
- **Web Development:** HTML, CSS, SpringBoot, React.js, Angular.js, Node.js, jQuery, and Rails.
- **SDLC and Productivity Software:** Agile Methodology, Software Development Life Cycle, Microsoft Office, and Adobe Suite.
- **Testing and Quality Assurance:** Selenium, JUnit, Cucumber, rSpec, and Pytest.