Kavin Suraj Jeyasankar

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Education

Bachelor of Science **Colorado School of Mines** **Golden, CO, USA** **08/2021-12/2024**

- Major: Computer Science Focus Area: Computer Engineering GPA: 3.52

Work Experience

Qualcomm: *Software Engineering Intern* **08/2024 – Current**

- Designed and implemented a concurrent solution for data collection on LTE and non-5G networks improving runtimes from **5 – 6 hours down to 5 – 10 minutes**.
- Modernized Qualcomm's previously error prone data collections and analytics infrastructure with **Python Fast API, REST API development, SQL Alchemy, Power BI and packaging with Linux RPM**.
- Utilized Jira to manage tasks, track progress, and facilitate effective communication, ensuring alignment with **Agile** methodologies for iterative development, timely updates, and efficient resolution of issues.

Charles Schwab: *Software Engineering Intern* **06/2024 – 08/2024**

- Led the design of a web application to efficiently choose the proper vendor for notifications for Charles Schwab applications with **Angular, Kafka, C# / .NET, and MongoDB** improving user experience of 34.8+ million users.
- Developed and integrated **a RESTful API** for the digital messaging platform, ensuring seamless communication with external vendors and assisting with client experience and saving 100K+ dollars yearly.
- Actively contributed to the execution of SDLC best practices by participating in daily scrum meetings, conducting thorough code reviews, and promoting continuous integration and delivery processes.

The Center for Hydrate Research: *Software Engineering Intern* **08/2023 – 05/2024**

- Designed and modernized one-of-a-kind software used to predict stability of hydrates in nature using the latest technologies available with **C++ version 20**.
- Significantly optimized existing software through implementation of C++ 20 features like lambda functions, transforms, and ranges to bring runtimes from **60+ minutes on older versions down to 4 seconds**.

FTC Robotics: *Software Engineering Mentor* **09/2019 – 04/2022**

- Led the team to 2nd place in the state championship while teaching path following algorithms and frameworks such as pure pursuit as well as **Java programming principles**.
- Implemented odometry to significantly improve position accuracy with variation per trial reducing from an average of **11.8 inches of variation to 3.4 inches** of variation, an improvement of 71%.

Projects

Shuffle - Social Media Application (~21,000 lines) – Full-stack

- Developed a full-scale social media application end-to-end with content created and operated entirely by artificial intelligence (**openai API**) and containerized with **Docker**.
- Utilized **Google Cloud Platform** (GCP) services (**Cloud Run, Pub/Sub, Buckets, Cloud Functions, Artifact Registry**) for creating secure and scalable architecture, storage, and deployment for 10+ monthly users.
- Designed and integrated a **NextJS** frontend responsible for responsive user interfaces, **Google Firebase** for real-time data handling and secure user authentication, and **Python** for server-side logic and **API development**.

AI Board Game (~7,000 lines) - Java

- Designed and developed Clue board game (**Java/Eclipse**) with clean and complete UI as well as clean and modular code with the implementation of **OOP principles and SOLID programming principles**.
- Created artificially intelligent computer players to make smart decisions derived from human players movement, accusations, and suggestions and ensured functionality with Junit testing.

Skills

- C++ | Java | Python | C | C# | SQL | HTML | JS | CSS | Unit testing | JFrame | Junit | OOP | Git | Fast API
- PostgreSQL | Google Cloud Platform (GCP) | Firebase | Linux | Shell Script | Flask | TypeScript | Kafka
- SQLAlchemy | openai API | Bootstrap | React.js | .NET | Next.js | Express | MongoDB | Angular | Agile