

Rahul Shamkuwar

Denver, CO

Mobile : +1-669-282-0030

Email : rahulshamkuwar20@gmail.com

GitHub : rahulshamkuwar

LinkedIn : rahulshamkuwar20

EDUCATION

- **University of Colorado Boulder**

Bachelor of Science in Computer Science; GPA: 3.94

Boulder, CO

Fall 2022 – Fall 2024

- **University of Illinois Urbana-Champaign**

Bachelor of Science in Aerospace Engineering; GPA: 3.46

Urbana-Champaign, IL

Fall 2020 – Spring 2022

SKILLS

- **Languages:** Typescript, JavaScript, HCL, HTML, CSS, Python, C/C++, Scala, Dart, C#, Java, SQL, NoSQL.
- **Technologies:** Node.js, Nest.js, React, Next.js, React Native, Flutter, Tailwind, Swagger, Postman, pandas, NumPy, JupyterLab, Scikit-Learn, PyTorch, Optuna, TensorFlow, Keras, Jest.
- **Tools:** AWS, OCI, Terraform, Kubernetes, Docker, GitHub Actions, Git, ESLint, Prisma, Firebase, Jira.
- **Knowledge:** Linux, CI/CD, UI/UX, Cyberbotics: Webots, VMWare, VirtualBox, Data Science, Agile.

EXPERIENCE

- **Trimble Cloud**

Software Engineer

Boulder, CO

September 2023 - Present

- **Dashboard Development:** Led the design and development of a dashboard website for monitoring emission metrics from AWS and Azure services, collaborating closely with a 6-person team.
- **Cloud Architecture:** Crafted and deployed a multi-service cloud infrastructure using Terraform, enhancing operational scalability.
- **State Management Setup:** Initiated and managed the remote Terraform state file setup using AWS S3 and DynamoDB.
- **Security and Load Balancing:** Integrated ELB with OpenID for security and efficient load management.

- **Blueprint**

Infrastructure Lead and Software Engineer

Boulder, CO

January 2023 - Present

- **AWS Amplify Deployment:** Spearheaded the deployment of Blueprint's website on AWS Amplify, optimizing its scalability, reliability, and performance, resulting in a robust and highly available web infrastructure.
- **SSL and Domains:** Implemented SSL certificates and configured domain settings, enhancing the website's security and trustworthiness, resulting in improved user confidence and SEO rankings.
- **Gatsby to Next.js Migration:** Led successful migration of a Gatsby.js project to a Next.js framework, improving website performance and scalability while ensuring a seamless user experience.
- **SQL Migration:** Designed, developed, and executed a migration script using MySQL to transition from legacy to a new database schema, demonstrating deep technical expertise and attention to detail.
- **End-to-End Testing:** Managed end-to-end testing and validation of migration process, effectively ensuring data integrity, minimal downtime, and zero data loss during the transition.

- **Skillsprint**

Founding Software Engineer

Boulder, CO

November 2022 - January 2023

- **Advanced Authentication Development:** Engineered a robust authentication system using JWT tokens and Nest.js route guards, significantly bolstering application security and ensuring secure user access.
- **Technological Integration Mastery:** Successfully integrated and optimized diverse tech stack (Prisma, Swagger, Prettier, PostgreSQL) for efficient backend service.
- **CI/CD:** Implemented GitHub Actions to automate testing and cloud deployment, streamlining the CD pipeline to Vercel for frontend and AWS EC2 for backend services, enhancing development agility and reliability.

- **ACM@UIUC**

Chair of SIG Mobile

Urbana-Champaign, IL

May 2021 - May 2022

- **Mobile App Development Leadership:** Led and participated in full-stack development of a mobile app using Flutter for the frontend and Express for the backend.
- **Cutting-Edge Website Development:** Pioneered the design and development of a dynamic and responsive website for SIGMobile, harnessing the power of Nuxt.js 3 to elevate the club's online presence and accessibility.
- **Knowledge Sharing and Skill Enhancement:** Fostered continuous learning through organizing and leading Flutter educational sessions, enabling club members to enhance coding skills and adopt industry best practices.

PROJECTS

- **HackCU 2024 Winner:** Secured 1st place at the 24-hour HackCU 2024 competition by developing a mobile app using Expo and React Native, designed to incentivize lecture attendance through a fantasy football-style bracket system among friends, awarding points for class participation.
- **HackCU 2023 Runner Up:** Engineered a Chess-Street Fighter-inspired Unity game in just 24 hours, showcasing adaptability and creativity.