Kyle Reinholdtsen

Software Engineer

About

Full-stack software engineer with hands-on experience building production-ready web apps using React, Angular, Node.js, and AWS. Passionate about frontend UX, scalable backend design, and cloud-native deployments using Docker and serverless architecture. Strong foundation in distributed systems and team-based software delivery.

Skills

Languages

TypeScript, JavaScript, Python, Java, HTML, CSS

Frontend

Angular, React, Redux, Responsive Design, RxJS

Backend

Node.js, Express, REST APIs

AWS

S3, Lambda, DynamoDB, Fargate, ECS, API Gateway

DevOps & Tools

Git, Docker, CI/CD, Linux

Certifications

AWS Certified Cloud Practitioner

Education

06/2021 - 12/2023

B.S. Computer Science & Engineering, University of Washington, Seattle

GPA: 3.88 (Cum Laude)

Technical Experience

01/2022 - 03/2023

Software Engineer, Husky Robotics, University of Washington, Seattle

- O Built the mission control website for Husky Robotics, a student engineering team, to operate the team's rover using JavaScript, React, and Redux.
- Maintained high code quality through Git-based collaboration, including feature branching, peer reviews, and issue tracking with detailed documentation.
- Designed and implemented a custom WebSocket-based JSON messaging protocol to enable real-time, bidirectional communication between the mission control website and the rover.
- Created UI elements to display rover camera feeds and telemetry data (position, power, velocity).
- Implemented a 3D rendering of the rover with React Three Fiber, dynamically updated in real-time using telemetry data.

Projects

Paintle, paintle.net, GitHub

- Created Paintle, a website inspired by Wordle where users solve a daily puzzle by painting a 5x5 grid.
- O Built a responsive frontend using Angular, designed for seamless play on both desktop and mobile
- Deployed a fully serverless architecture on AWS using S3 (frontend), Lambda (backend logic), API Gateway (routing), and DynamoDB (storage), achieving $<200 \,\mathrm{ms}$ cold-start latency and \$0 backend cost under typical usage.
- Implemented secure authentication via Google OAuth 2.0 and JSON Web Tokens (JWT), incorporating best practices such as short-lived tokens, RS256 asymmetric signing, and validation of token audience and issuer.

MCQuest, GitHub

- Developed a custom Minecraft server to support a multiplayer RPG with questing, combat, and
- Collaborated with a 5-person team using Agile practices including structured requirements planning, sprint-based development, weekly standups, and CI/CD pipelines to ensure quality and fast iteration.
- Implemented backend systems in Java for handling in-game mechanics such as physics calculations, skill behavior, item interactions, and data persistence.