

Phurushotham Shekar

SOFTWARE ENGINEER

Vancouver, BC

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Summary

Software engineer with 5 years at AWS building and scaling the IoT Console in React and TypeScript, with hands-on DevOps experience. Seeking a mid-level role building performant, customer-focused features.

Experience

Amazon Web Services - IoT Console

Seattle, WA / Vancouver, BC

SOFTWARE DEVELOPMENT ENGINEER

Oct 2021 - Present

- Prevented a page-load regression for a new console feature serving customers with 1M+ items by researching and adopting an internal GraphQL tool to eliminate an N+1 API problem (client-server calls reduced to 1), and modernizing a 2019-era React console by rewriting pages and upgrading outdated dependencies with no backend changes.
- Designed and prototyped a human-in-the-loop AI agent workflow for engineering tasks (map repo → identify issues → propose solutions → implement fixes), with editable checkpoints at each stage so engineers can validate, correct, and understand every step.
- Led the team's first accessibility initiative, resolving 350+ violations across a console by organizing and delegating fixes, implementing automated unit tests to catch future regressions early, and documenting solutions to accelerate compliance in future consoles.
- Shipped two features for a global customer launch across two consoles, including an exclusive resource association workflow requiring promise pool management to stay within TPS limits. Extended CRUD coverage to a second console after identifying customer-facing feature gaps not in the original scope.
- Improved console load performance by profiling and optimizing Webpack bundling to eliminate duplicate asset downloads, cutting max bundle size from 550kB to 300kB and reducing Largest Contentful Paint (LCP) from 2.4s to 1.6s.
- Improved developer tooling by leading a feature flag system migration for 150+ flags across 30+ engineers, and writing bulk-operation scripts later adopted into the team's internal tooling package.
- Eliminated false CloudWatch alarms from 4-10 per week to 0 by root-causing canary flakiness, while maintaining service SLA across 24/7 on-call rotations, resolving customer-impacting incidents, and achieving full CD across pipelines through improved test coverage.
- Improved telemetry and feedback quality across the console by embedding context-enriched UX feedback forms that captured error state, page context, and session metadata, increasing the proportion of actionable feedback in weekly UX reviews by 4x.

Rutgers University: Division of Student Affairs and Marketing

New Brunswick, NJ

WEB DEVELOPER INTERN

May 2019 - May 2020

- Reduced page load times by over 60% across 25+ Student Affairs sites by migrating from WordPress to Drupal, minimizing external widget dependencies, and modernizing site architecture using Bootstrap 3, SCSS, and JavaScript.
- Accelerated site redesigns across the portfolio by using Figma and Adobe XD to plan and modernize designs before implementation, ensuring WCAG compliance and a consistent visual standard.
- Enabled 50+ departmental staff to independently manage site content by writing end-to-end user documentation for the new Drupal platform, reducing on-boarding friction for non-technical users.

Education

Rutgers University

New Brunswick, NJ

BSC. IN ELECTRICAL AND COMPUTER ENGINEERING & MINOR IN COMPUTER SCIENCE

Graduation: Aug. 2020

Projects

Galleria

New Brunswick, NJ

PERSONAL PROJECT

Fall 2020

- Enabled users to upload and browse images up to 1GB by building a ReactJS frontend backed by AWS Lambda and API Gateway, compressing uploads into thumbnails, and storing them securely in S3 using pre-signed URLs to maintain bucket privacy.
- Improved upload transparency for users by implementing real-time stage notifications throughout the upload process, keeping users informed at each step without needing to refresh or navigate away.

The Next Generation Hearing Aid

New Brunswick, NJ

SENIOR CAPSTONE DESIGN PROJECT | 8TH OF 70 TEAMS

Spring 2020

- Enabled hard of hearing users to safely navigate the outside world by developing a hearing aid system that connected an AR Android app with a Dragonboard-controlled headset to provide real-time spatial audio awareness.
- Calculated real-time 2D sound direction by integrating four microphones and vibration motors with a Dragonboard written in C and Python, transmitting directional data to the Android app via Bluetooth to trigger both visual and haptic feedback.

Skills

Languages

JavaScript, TypeScript, Java, Python, C, HTML, CSS/SCSS

Frontend & Testing

React, GraphQL, REST APIs, Webpack, Accessibility (WCAG), Jest, React Testing Library

AI & Agentic Tooling

LLM-based Developer Tooling, Prompt Design, Claude Code

Cloud & Practices

AWS (CloudWatch, Lambda, S3, API Gateway), CI/CD, Git, Agile, Figma