Alec Minchington

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Work Experience

Amazon Web Services, Seattle, WA   September 2022—Present
Software Development Engineer I – AWS App Studio & Unannounced Generative AI product
- Developed a new, simplified onboarding feature for AWS App Studio, a generative AI-powered, low-code web application builder for business users, which increased the onboarding completion rate by 30% and decreased the abandon rate by 6%
- Designed and implemented a framework to allow App Studio engineers to securely and quickly scrub Personally Identifiable Information from service logs stored in CloudWatch, which was used to clean log data across two production instances and successfully redacted 90GB of log data
- Optimized App Studio's code generation engine by migrating the existing state management implementation to use a more efficient state management library and by simplifying rendering algorithms, resulting in a 90% decrease in code generation render latency across all use cases
- Improved App Studio's app creation flow by creating a new API for customer teams to optimize their code, leading to a 95% decrease in app creation latency for all customers
- Designed and implemented an all-new foundational testing framework for easy snapshot testing of auto-generated code that has been adopted ubiquitously across the App Studio organization to rapidly write tests
- Implemented core functionality of the highly customer-requested Undo/Redo feature for App Studio, saving customers hours of manually undoing and redoing changes

Needlestack LLC, Troy, MI   May 2022—September 2022
Front End Development Engineer – Athena Learning Management System
- Designed and implemented UX for core features of the Athena Learning Management System, an innovative competitor to Canvas, including assignment & exam administration, and AI-powered student insights

Amazon, Seattle, WA   May 2021—August 2021
Software Development Engineer Intern – Consumables Shopping Experience
- Developed web application to simplify the complex process of onboarding internal customers' new A/B feature experiments on amazon.com

EECS 485 & EECS 398, University of Michigan, Ann Arbor, MI   September 2020—May 2021
Instructional Aide – Web Systems & Programming Paradigms
- Instructed students in web programming concepts and helped solve code issues during office hours
- Guided students through implementation of a programming language interpreter via lab sessions & office hours

Amazon, Seattle, WA   July 2020—September 2020
Software Development Engineer Intern – Consumables Customer Experience
- Created a web application to query Amazon product listing data from Elasticsearch and allow internal customers to gain insights into the data via dynamic visualizations

EECS 280, University of Michigan, Ann Arbor, MI   January 2019—May 2020, August 2021—December 2021
Instructional Aide and Cheat Checking Lead – Programming and Introductory Data Structures
- Bolstered students' understanding of C++ programming concepts by hosting a weekly lab session
- Helped students solve their software & programming problems in office hours
- Analyzed student code submissions to find evidence of cheating

Education

University of Michigan College of Engineering, Ann Arbor, MI – BSE in Computer Science   April 2022

Skills

Languages: TypeScript, JavaScript, Python, C, C++, Java, HTML, CSS, Smithy, SQL
Libraries/Frameworks: Node.js, Bun, React, Next.js, NestJS, Recoil, Jotai, TailwindCSS, CDK
Software: VS Code, vim, bash, zsh, tmux, git, GitHub, Docker, Figma, npm, pnpm, Vite, Cline, Roo Code
Tools: AWS/Cloud platforms, REST, GraphQL, Microservices, CI/CD, Debian/Ubuntu/Arch Linux, macOS, Proxmox VE
Soft Skills: Code review, Agile, Problem-solving, Team collaboration, Teaching, Presentation, Public speaking