

Thomas McKernan

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Professional Summary

Software Engineer with 5+ years of experience in cloud infrastructure, DevOps automation, and distributed systems. Proven track record of optimizing AWS costs, reducing CPU and storage usage, and leading large-scale migrations. Skilled in Java, Kotlin, and Python development with expertise in CI/CD pipelines, Kubernetes, and cloud-native solutions. Adept at problem-solving, mentoring, and delivering high-performance systems that improve reliability and availability.

Skills

Programming: Java, Kotlin, Python, Rust, Bash

Cloud & DevOps: AWS, Kubernetes, Docker, Helm, CloudFormation, GitHub Actions, Jenkins, CI/CD

Tools & Frameworks: Spring, Linux, Typescript, Git

Other: Agile, Scrum, Mentoring, Problem-Solving, Ownership

Experience

Senior Software Engineer

Aug 2023 – Present

SS&C Advent

- Migrated CI system to a new private cloud, ensuring scalability and reliability
- Transitioned CI system from Jenkins to GitHub Actions for faster, modern pipelines
- Developed custom TypeScript GitHub Actions to manage component builds
- Maintained Python install scripts and Helm-based Kubernetes clusters

Software Engineer II

Mar 2022 – Jul 2023

Amazon Web Services

- Reduced AWS S3 usage by 60% through storage optimization
- Designed and reviewed code changes that improved customer metrics accuracy
- Implemented custom Java data structures, lowering CPU usage by 20%
- Built new features to decrease IOPS and improve customer availability
- Maintained global regional parity through CI/CD automation
- Analyzed and compared storage engines and databases for scalability

Software Engineer I

Feb 2020 – Mar 2022

Amazon Web Services

- Upgraded large-scale Python applications from 2.7 to 3.4, preventing EOL issues
- Built and launched CloudWatch Contributor Insights for DynamoDB on CloudFormation
- Resolved DynamoDB throttling by analyzing logs and metrics for customers
- Automated ticket enrichment using tooling packages and bots

Education

University of Dayton

Aug 2016 – Dec 2019

B.S. Computer Science, Minor in Mathematics