

Nathan Classen

Tulsa, OK | hayesclassen@gmail.com | <https://www.linkedin.com/nathanclassen>

Software Engineer and AWS Certified Solutions Architect & Associate, with over 4 years experience in backend engineering and cloud development; skilled in leveraging a wide range of AWS offerings to build scalable and robust solutions. Adept at effectively communicating technical concepts to technical and non-technical stakeholders. Committed to continuous learning and honing my craft.

Experience

Software Engineering Consultant - *Slalom*

Jul 2022 - Present

Build deep familiarity with client software ecosystem to design solutions for improving cost, scalability, orthogonality in complex cloud-native systems.

- Built event sourcing service in Java, decoupling services and improving extensibility.
- Wrote ETL pipeline in PostgreSQL to migrate over 700+ million rows of legacy data as events, creating durable state replica for new APIs.
- Built AI FAQ agent in Node.JS and LangChain, trained on private data in Pinecone Vector DB.
- Accelerated development by teaching Serverless (IaC) and CI/CD concepts to teammates.

Software Developer II - *TechInsights*

Jun 2020 - July 2022

Drove user adoption of platform with thousands of daily active users by building services to improve performance of platform, as well as creating new user experiences for customers in semi-conductor engineering space

- Created super-hi resolution image viewer component in Angular application using Open Sea Dragon.
- Drastically reduced latency by creating a serverless image processor in Go and AWS Lambda, for concurrent on-the-fly resizing.
- Designed microservice for Salesforce marketing integration using Go, AWS Lambda, and SNS/SQS, enabling scalable automated outreach

Co-Creator, Software Engineer - *Bento*

Jan 2020 - Jun 2020

Created in-house video transcoding solution for small to medium companies, conducting research into serverless computing and video processing to design and build a serverless video transcoding pipeline, written in Node.JS.

- Designed architecture to fan-out synchronous process to hundreds of containers executing in parallel.
- Cut time to transcode by 90% when compared with single EC2 instance running transcoding software, and 50% when compared with Amazon MediaConvert.
- Resolved high-concurrency race conditions with event-driven architecture, tracking state via DynamoDB and streaming events.
- Co-Authoring detailed case study describing the Bento pipeline and the engineering challenges of serverless architectures bento-video.github.io

Personal Work

Cantor: React Native mobile app—deployed to App Store and Google Play using Fastlane—which facilitates liturgical singing of the Psalter. cantorpsalms.com

Technologies

Languages and Frameworks: Javascript, Go, Java, Spring, Angular, React

AWS: EC2, ECS, Lambda, SNS/SQS, DynamoDB, RDS, S3

Data: PostgreSQL, SQL, Flyway

Infra: Docker, K8s, Terraform, Serverless Framework

CI/CD: Git, Github, Bitbucket Pipelines, Jenkins, Gradle

Education and Certification

Launch School, 2017 - 2020

Software Engineering school with multi-year curriculum based on mastery of programming fundamentals.

AWS Certification, 2023

AWS Certified Developer - Associate

AWS Certified Solutions Architect - Associate