Noah Lee

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Backend-focused Software Engineer with 6 years of experience building cloud-native systems on AWS, with full-stack range, a track record of migrating legacy infrastructure at scale, and experience leading and mentoring engineers alongside individual contributor work. Proven ability to deliver across diverse tech stacks and organizational contexts from growing startups to enterprise scale, and confident contributing meaningfully from the start.

Skills

Languages/Frameworks: Python, C#, .NET Core, Java, Spring, node.js, React, TypeScript, Express, Swift, Vapor, Bash

Cloud & DevOps Tools: AWS, Docker, Kubernetes, Harness, TeamCity, Bamboo, Terraform

AWS Services: Lambda, APIGW, S3, SQS, EKS, MSK, CF, ECS, ECR, ALB, IAM, EC2

Databases: SQL, DynamoDB, SOQL (Salesforce DB), MongoDB

Other Tools/Skills: Apache Kafka, Postman, VSCode, Agile, JIRA, Leadership, Event Planning

Work Experience

UNITED AIRLINES - Software Engineer   *Chicago, IL; 09/2022 - 02/2026*

- Architect and implement AWS Lambda solution to process 3,000+ Kafka messages per day ingested from legacy on-prem services to integrate existing data with new scalable cloud services
- Migrate legacy on-prem service to AWS EKS and refactor to reduce latency by 50% while developing new features and new integrated services to support migration from legacy to cloud databases, using Kubernetes and Dynatrace for production monitoring and incident resolution
- Lead and onboard newly formed team to coordinate vulnerability remediation across 3 teams, training engineers in secure code and managing biweekly releases to resolve 16,000+ vulnerabilities in a year across Java Spring and Python apps in AWS EKS and Lambda scanned by multiple security platforms

AIRLINES REPORTING CORP. - Site Reliability Engineer   *Remote; 02/2022 - 08/2022*

- Improve team collaboration by documenting SRE team practices and project norms, implementing standards to streamline onboarding process to different teams, projects, and technologies
- Automate Lambda error handling to reduce manual toil on common recurring errors by over 50%

QUATIVA - Full-Stack Engineer   *Remote; 09/2021 - 12/2021*

- Build adaptive iOS front-end and extend .NET back-end, integrating 3rd party data in user experience
- Integrate across the full-stack by building .NET back-end to serve data to React frontend app

CDK GLOBAL - Software Engineer II   *Hoffman Estates, IL; 11/2019 - 05/2021*

- Design and communicate flexible data model in .NET back-end using data from sales client interviews
- Architect Apex API endpoints to create a single source of truth for sales data used across 10+ services

SILVERWORK SOLUTIONS - Software Engineer   *Chicago, IL; 07/2019 - 11/2019*

- Develop process to concurrently initiate work for client to save thousands per month on bot licenses
- Write .NET Core library for internal devs to easily access common APIs with configurable logging

Education

University of Illinois at Urbana-Champaign   *Champaign, IL*

Bachelor of Science in Computer Science in Engineering   *May 2019*

Side Projects

<u>FindMyFGC Fighting Game Event Finder</u> *node.js, React, Swift, Vapor, Docker, Terraform, ECS*

- Architect React front-end deployed to S3 with CloudFront and Swift Vapor back-end deployed to ECS to compose a full-stack web app for searching fighting game tournaments based on user preferences

- Integrate Google Gemini API to leverage AI for flexibly converting user-provided location input into coordinates to enable intuitive place name searches with full address and zip code support

- Design Terraform modules and GitHub Actions workflows to streamline reliable deployments, minimizing TOIL for maintenance and building infrastructure with future projects in mind

- Engineered end-to-end network security by routing traffic through Cloudflare DNS to ACM-validated HTTPS endpoints and isolating backend within a private VPC, preventing direct public backend access

<u>Discord Event Admin Bot</u> *Python, Terraform, CloudFormation, DynamoDB, Lambda, API Gateway, SQS*

- Automate administration for online events and tournaments hosted on start.gg to reduce human error and streamline the experience running events for both participants and organizers

- Streamline configurability with single source of truth for application information and bot commands to standardize naming and improve code readability

- Onboard new developer as a collaborator and mentor in architecture, infrastructure, collaboration, and development best practices used for this project

- Design data model to handle different event types, custom user settings, and extendability to support further types of events and configuration

- Optimize response time and user experience by providing users quick responses, setting expectations for wait times as heavier operations are dispatched to worker Lambdas via SQS

<u>FGC League Sheets Automation</u> *TypeScript, Google Apps Script, Clasp*

- Develop Google Sheets extension app to automate work for running long-term competitive "leagues", distributing players into groups and ranking them based on win rates

- Collaborate directly with end users to design around real use cases, understand edge cases, and discern current and future user needs to build a stable intuitive experience for non-technical users

- Distribute the extension by binding to a viewable, copyable Google Sheets to provide a familiar point of access for this app while using text within the file to clearly document usage

- Accelerate end-to-end delivery by driving development with a comprehensive design and data model plan, leveraging AI-assisted tools to ship a full working extension app in 2 days

<u>Fighting Game Frame Data Bot</u> *Python, CI/CD, DynamoDB, Lambda, API Gateway*

- Develop API integrated with AWS Lambda to embed game data from DynamoDB in Discord chat

- Build full GitHub Actions prod and dev pipelines and deployments to facilitate safe and fast updates

- Implement Beautiful Soup web scraping to automate retrieval of data from wikis to be served from bot