AJ Danelz

Software Engineer and Advocate

I am a full-stack cloud application engineer, and developer advocate passionate about distributed cloud applications. I am a golang enthusiast trapped in a Java dev's body. I have been a cloud-native aficionado since the moment I learned there was a world outside of VMs and server racks. My passions for event streaming and microservices fit nicely in the cloud. I love working for a global company, working with both technical and non-technical team members. I have served in a leadership role for the majority of my development career. In any role, I will contribute to the success of a software project by advocating internally and externally for all developers.

Linktr.ee | resume pdf

Experiences

Head of Developer Experience

Mar 2023 - Nov 2024

Aklivity

Aklivity is a startup and small team, and I served in a leadership role on a team of one. I have created the onboarding and overall developer experience for the Zilla project, which meant a completely new documentation site and <u>Demos repository</u>. I created or updated all of the demos and examples to be runnable by a single command. I improved the quickstart and managed the live service that new users interact with. I published <u>community</u>

updates, feature announcements, and demo walkthroughs. I managed the community feedback, being the first line of communication and troubleshooting. I built all of the demos for conferences and worked the booth.

OSS maintainer

Jan 2019 - Present

gohlay | awesome-data-engineering

I wrote an open-source CLI tool that adds a scheduled message system to Kafka using Golang called <u>Gohlay</u>. It has a small footprint and can scale efficiently without any external data source dependencies. I took over as the primary maintainer of the <u>awesome-data-engineering</u> list to keep it up to date.

OSS Contributor

mqtt-simulator | zilla | grpc.io | exercism.io | vuepress/core | wso2/k8s | hugo-wrapper | mattermost | open-telemetry | grafana/alloy

Head of Developer Relations

Jan 2022 - Mar 2023

WSO2

I lead the team that builds and fosters the community of developers around the Open Source and SAAS projects at WSO2 along with the Ballerina programming language <u>ballerina.io</u>. Additionally, I led the technical writers who worked on each product documentation site and the company training material, leading them to improve the developer experience for both. I led the team in putting on a global hackathon. I was a speaker at and worked the conference booth for multiple large and small events. I also created the Ballerina Exercism.io track

Lead Solutions Engineer

Feb 2021 - Jan 2022

WSO2

I was a technical sales engineer who helped customers solve problems with WSO2 products. I brokered the deal for the first customer on the <u>Asgardeo</u> SaaS platform. Wrote an opinion piece on <u>auth and tech debt</u>.

Sr. Full Stack Developer

Feb 2020 - Feb 2021

BMW: Apps and Services

I was a senior team member building a service that provided electric car drivers with optimized vehicle charging, called bmwchargeforward.com. This app connected many internal BMW systems but interfaced with power companies to provide up-to-date energy data. In addition, I coordinated with top vehicle manufacturers and utility companies to build a system to securely send electrical grid data from the utility companies to each electric car manufacturer.

Sr. Enterprise Application Engineer

2018 - Feb 2020

AFS Logistics

I worked as a lead engineer on a team building a new Transportation Management System from the ground up using a microservice architecture. Spring Boot, gRPC, Protobuf, Kafka, Elastic Search, Vue.js, PostgreSQL, Docker, Kubernetes, Helm.

Full Stack Mentor

2018 - 2020

Thinkful Inc

I worked one-on-one with students in the program, teaching them how to use React.js and implement web design patterns. My main goal was to help overcome hurdles and provide more depth to the program where needed.

Enterprise Application Engineer

2012 - 2018

Transplace

I maintained legacy applications, worked on improvements and new features of existing products like <u>Realtime Search</u>, and architected new applications like the <u>Dynamic EDI Parser</u>.

Projects

Gohlay

Project repo

I wrote an open-source CLI tool that adds a scheduled message system to Kafka using Golang called <u>Gohlay</u>. It has a small footprint and can scale efficiently without any external data source dependencies.

BMW Charge Forward

Project Homepage

This project includes a collection of BMW internal services providing vehicle data sources. They are used to optimize electric vehicles charging times. AWS Lambda, SQS, and Kinesis were built together in a Typescript mono repo to manage the streams of vehicle event data. The backend was built with node Nest.js framework and PostgreSQL.

Transportation Management System

AFS company site

This project includes a collection of applications and microservices deployed with Docker, Kubernetes, and Helm. Projects I participated in A Rating System designed for high throughput and consists of multiple microservices using Spring Boot, Golang, Protobuf, gRPC, Redis, PostgreSQL, and Vue. A Document Manager built to control the ingestion of physical documents using Spring Boot, Protobuf, gRPC, WebSockets, RabbitMQ, PostgreSQL, Google Cloud API, and Vue. A Delayed Messaged Delivery service that can scale for high volume built with Kafka, Redis, and Spring Boot.

BallerinaLang Exercism.io

Exercism Track

I updated the code execution and testing environments and improved the base set of courses. I also added new courses that featured the language's recent features.

Dynamic EDI parser

Transplace => UberFreight

This reliable EDI parser can convert any EDI file into an object format of choice (XML, JSON, etc.). I developed the algorithm that utilized specific Java class definitions to know how to parse any EDI file. The algorithm gave us the power to define broad or specific rules in each Java class file that would teach the algorithm how to read any EDI file. Future devs could then extend the classes to build custom file parsers.

Realtime Search

<u>Transplace => UberFreight</u>

All of the data in the monolithic Groovy on Grails application was stored in a PostgreSQL database, with all of the search queries going through the Hibernate ORM down to the database. The application architects created a dynamic search builder language that could be generated off of the Java POJOs and rendered in the UI without any manual code. I developed the data ETL pipeline for

every update to push JSON to an ElasticSearch cluster. The custom query UI and language could not be replaced, so I made a flexible query translator to map to the ElasticSearch Query DSL. Any normal object fetching would go through the ORM, and the dynamic search builder queries would be translated and sent to ElasticSearch. This significantly reduced the database's processing load and improved user-built query speeds.

Public content

- Product Demos
- Product Documentation
- Community updates
- Feature announcements
- Global Hackathon
- Demo walkthroughs
- Opinion article: Auth and tech debt
- exercism.io ballerina course

Skills

Tech	Proficiency
Golang	80%
Java, Spring Boot	82%
Front End, Vue, React	90%
Kafka, Event Driven	80%
Git, Devops, CI/CD	90%
Docker, Kubernetes, Helm	85%
gRPC, Protobuf	80%
PostgreSQL, Grafana, Elastic Search	72%

Education

B.S. in Computer Science Cum Laude

Anecdotes

- Eagle Scout with the Silver Palm
- Orchestrated and participated in many leadership programs and service projects
- Research article: Path Planning using Dijkstra and Lightning Enhancement

Hobbies

- Hiking
- Scuba Diving
- Traveling
- Mixology
- Disc Golf
- 3D Printing