

Athavan Kanapuli

Senior Software Engineer - Asynchronous Communications

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Profile

Senior Software Engineer with 9+ years of expertise spanning cloud-native technologies and distributed systems. Currently serving as a founding engineer at a pioneering Industrial IoT startup, architecting solutions from infrastructure to application layers. Proven track record of reducing AWS costs by 40% through Kubernetes migration, improving customer conversions by 9%, and enhancing data flow visibility by 75%. Passionate [open source contributor](#), Linux enthusiast, Kafka specialist, and [technical writer](#) focused on building scalable, resilient systems.

Experience

Model Context Protocol (Open Source)

2025

Creator & Maintainer

- Built a natural language interface (NLI) for Kafka that simplifies interactions using everyday language instead of complex commands.
- Designed and implemented a Model Context Protocol server allowing non-technical users to communicate with Kafka systems.
- Project benefits include: simplifying Kafka interactions, bridging the gap for non-Kafka experts, and leveraging LLM technology for context-aware commands.
- Source code available at: github.com/kanapuli/mcp-kafka

United Manufacturing Hub, Cologne

Aug 2024 - Present

Founding Engineer

- Architecting and building software solutions for Industrial IOT to adopt Industry 4.0 standards and helping industries to digitize their operations.
- Responsible for managing the infrastructure, platform tools and backend services that powers the [umh.app](#) product.
- Acting as a core contributor to the company's open source project [benthos-umh](#).

Hellofresh SE, Berlin

Oct 2020 - July 2024

Senior Software Engineer

- Leading the implementation of a comprehensive initiative across the company to rebrand Kafka topics for enhanced governance, resulting in a notable 75% improvement in data flow visibility.
- Managed the creation of a central schema registry service serving as a governance entity for asynchronous communication schemas.
- Responsible for maintaining Go-based Kafka and RabbitMQ libraries.
- Established consensus within the engineering organisation on high-level technical designs for data streams.
- Re-architected a Go backend service that improved the customer conversions by 9% and reduced the number of incidents.
- Extracted PHP monoliths into Go microservices using Change data capture pattern.
- Acted as Hiring manager to bring top-tier software engineer talent into the business.

- Introduced Apache MirrorMaker2 to the organisation and developed custom tooling around it to rename Kafka topics according to Hellofresh needs.
- Drafted an internal Request for Comments (RFC) proposing the implementation of Personally Identifiable Information (PII) Tagging within data schemas utilized for asynchronous communications.

Exotel Techcom Pvt Ltd, Bangalore

Feb 2018 – Sep 2020

Site Reliability & Software Engineer - Platform

- Orchestrated the introduction and architecture of Kubernetes, facilitating the smooth migration of EC2-based cloud workloads to Kubernetes pods, thereby reducing AWS costs by 40%.
- Spearheaded the construction of a robust CI/CD pipeline utilizing Jenkins and Argo, aligning seamlessly with the Kubernetes paradigm which resulted in faster shipping of changes.
- Assumed a pivotal role in maintaining and enhancing cloud security measures. Awarded by the CTO as Security Ninja at Exotel.
- Engineered a metrics pipeline to systematically collect data from cloud workloads, furnishing actionable insights into the overall health of Exotel services.
- Hired and mentored engineering talent.
- Implemented automated telephone server installations through Ansible, significantly slashing the installation timeframe from one week to just a few hours.
- Developed a microservice designed to automatically recover critical service failures in a pre-Kubernetes environment.

Hirecraft Softwares Private Ltd, Bangalore

Feb 2015 – Feb 2018

Software Engineer - Backend

- Implemented a side project in Golang that enables the seamless Excel export of millions of business records with a single API click. This feature eventually became a highly sought-after addition to the Hirecraft web application.
- Created a backend web API server with a well-structured n-tier architecture, utilizing .NET Web APIs, RabbitMQ, Redis, Elasticsearch and MySQL.

Universal Telecom Private Limited, Chennai

Jan 2014 – Dec 2014

Field Engineer

- Employed in the telecommunications tower sector to implement Vodafone's 3G technology, involving the installation of equipment and the commissioning of devices with assigned IP addresses.

Education

Sri Sairam Engineering College *Bachelor of Engineering - Electronics & Communication — GPA (7.6) — 2013*

Skills

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|----------|--------------|-------------|
| • Go | • K3s | • Rabbitmq |
| • Kotlin | • Kafka | • Terraform |
| • Python | • Kubernetes | |

Quick Profile



(a) Github



(b) LinkedIn