

# Nithin Kumar KV

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## EXPERIENCE

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### Rippling

Aug. 2023 – May. 2024

Senior Software Engineer

Bangalore, IN

- Played a key role in designing and implementing Rippling's multi-region data residency system. This project entailed developing a framework for sharding company data by regional location and optimizing API routing to enhance global performance and scalability.
- Reduced the SLA Misses of critical asynchronous tasks by 80%, by incorporating chunking and staggered execution of tasks. Thus improving the reliability of the service
- Spearheaded service decoupling initiatives, for enhanced Scalability and improved Maintainability

### Amazon Web Services

May. 2022 – May. 2023

Software Engineer, EMR

Bangalore, IN

- Successfully addressed memory issues in EMR job engine container, resulting in an average saving of **500 MB memory** by altering the underlying logging infrastructure and using Fluent Bit instead of FluentD
- Identified and fixed the memory leak in the Fluent Bit Cloudwatch plugin when log rotation is enabled.
- Contributed significantly to the development of the interactive serverless component of AWS EMR service, enabling cost-effective and low-maintenance infrastructure for running large-scale big data and AI workloads.
- Successfully managed multiple on-call rotations, demonstrating strong responsibility and problem-solving skills by effectively responding to system failures and ensuring minimal downtime for stakeholders

### Practo Technologies

Mar. 2014 – Mar. 2022

Senior Software Engineer

Bangalore, IN

- Improved microservice communication efficiency by reducing the number of events exchanged between two services by 92% through the modification of the underlying algorithm, resulting in a significant reduction in the load on the system.
- **Serverless functions:** Successfully implemented AWS serverless lambda functions to replace an entire microservice, leading to a noteworthy 75% reduction in infrastructure costs for the microservice.
- **PollerService:** Developed a PollerService system to enable real-time synchronization of doctors' schedules between hospital HMS and Practo.com, scaling the service to support close to 4000 doctors' schedules.
- **Re-architecture:** Successfully re-architected the entire cloud platform structure of Qikwell Service, improving overall performance, availability, security and reliability of the system
- **Feature Lead:** Served as a Feature Lead for numerous large and small features, leading a team of 1-3 developers
- Automated the Kubernetes cluster creation and installation of custom ad-ons, **reduced the cluster switching time from months to hours.**
- Spearheaded the annual RDS, Elastic Cache reservation to save **30% on infrastructure cost.**

## OPEN SOURCE CONTRIBUTIONS

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**Fluent Bit :** Contributed a new [feature](#) in Fluent Bit, a popular open-source log processor, enabling users to specify an AWS profile name in S3, Cloudwatch, Kinesis, Firehose, ElasticSearch, and OpenSearch configuration. This enables users to configure multiple profiles and use them to push logs to multiple destinations simultaneously.

## TECH TALKS AND PUBLICATIONS

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- Delivered a [Tech talk](#) to a tech community(Kannur Developers Group) of 50 developers on Scaling the applications using AWS
- [Medium article](#) on creating multiple staging testing environment using a single server instance

## EDUCATION

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**Govt. College of Engineering, Kannur**

*B-Tech in Computer Science and Engineering*

Sept. 2009 – Jun 2013

Kannur, IN

- **Coursework:** Data Structures, Algorithms, Databases, Computer Systems, Machine Learning

## SKILLS

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**Languages :** Python, Java, Ruby on Rails, Shell Script, SQL (MySQL)

**Skills and Technologies :** Distributed Systems, Jira, GitHub, AWS, Redis, Serverless functions, SQS, Docker, Kubernetes, DynamoDb, MongoDB