NADUN DE SILVA

Software Development Engineer

Colombo, Sri Lanka
https://linkedin.com/in/nadundesilva
https://nadundesilva.github.io
https://github.com/nadundesilva

Summary

Software Engineer with 4+ years of experience in cloud native application development and data analytics, performing above the top 5% of the employees at WSO2. Background in architecture, user experience (UX), development and deployment of cloud native applications in production environments. Experience in owning the Observability area of Choreo and leading a team of engineers.

Experience

Associate Technical Lead

WSO2 June 2021 to Present Colombo, Sri Lanka

- Achieved the Sustained Outstanding Contribution Award for the third consecutive year — currently awarded only for the top 5% of the employees in the company.
- Engineered the minimum viable features for Choreo online editor's resource scheduling, within 1.5 months, leading another engineer, using Kubernetes and GoLang.
- Analyzed the startup time of the Kubernetes resources of the Choreo Editors and reduced the time by 80%, increasing the overall user experience.
- Reduced the MsSQL DB utilization by 60%, by introducing a Redis cache and randomization of cache expiry times, increasing the number of users the system can handle.
- Completed 95% of the targets and sprint milestones on time, by prioritization of tasks and fostering a good working environment.

Senior Software Engineer

WSO2 July 2019 to June 2021 Colombo, Sri Lanka

- Spearheaded and implemented the foundation for Choreo Observability within 3 months, with a team of 2 other engineers, creating the backbone of Choreo Observability.
- Architected the Choreo observability storages with data archival into a Data Lake, decreasing the cost by 90% for the company while storing the data for Machine Learning (ML) use cases.
- Revamped the observability instrumentation at Ballerina compiler level, within 1 month, to map the Observability data to the source code, providing a better debugging experience for users.
- Minimized and maintained the lowest number of bugs across all areas within Choreo by implementing proper code reviewing, testing and deployment practices in a team of 6 engineers.

Software Engineer

WSO2 January 2018 to July 2019 Colombo, Sri Lanka

- Delivered the Cellery Observability basic features within 2 months for observing microservice composites, using Kubernetes, Istio, OpenTracing and Envoy.
- Headed the implementation of Cellery developer tools using Language Server Extensions and visualizations of Cells using D3.
- Developed Cellery Hub backed by a Docker Registry as storage and authentication of the CLI and portal using OpenID Connect (OIDC), collaborating with a team, within 1 month.
- Implemented the Observability aspects of the WSO2 Serverless Platform using Prometheus and Jaeger on top of Kubernetes and OpenWhisk.

Skills

- **Programming Languages** — Java, GoLang, Python, JavaScript, TypeScript
- **Frameworks and Tools** — Gradle, JMeter, Express, React, TensorFlow, Numpy, Pandas, Azure Event Hub (Kafka)
- **Storages** — Time-series Databases (Influx DB, Azure Data Explorer, Azure Time Series Insights), Data Lakes (Azure Data Lake), Relational Databases (MySQL, MsSQL), Redis
- **Deployment** — Kubernetes, Kustomize, Docker, GitOps, Prometheus, Jaeger

Certifications

- Fundamentals of Reinforcement Learning
  Amii, University of Alberta September 2021
- Build Basic Generative Adversarial Networks (GANs)
  DeepLearning.AI June 2021
- Deep Learning Specialization
  DeepLearning.AI June 2021
- Certified Kubernetes Administrator
  The Linux Foundation December 2020
- Certified Kubernetes Application Developer
  The Linux Foundation January 2020

Education

B.Sc. (Hons.) in Engineering (Computer Science and Engineering)
University of Moratuwa January 2014 to December 2017 Colombo, Sri Lanka

- Attained a GPA of 3.85 out of 4.20, obtaining a First Class.
- Placements in Dean's List in 6 out of 8 semesters at the University of Moratuwa.
- Awarded Global Finalist (Galactic Impact) in the NASA Space Apps Challenge 2017.
- Completed Google Summer of Code 2017.

Publications

- "Generative Adversarial Networks (GAN) based Anomaly Detection in Industrial Software Systems" published in 2019 at Moratuwa Engineering Research Conference (MERCon)
- "Anomaly Detection in Industrial Software Systems — Using Variational Autoencoders" published in 2017 at the Proceedings of the 7th International Conference on Pattern Recognition Applications and Methods (ICPRAM)

Languages

Sinhala
English