

# NADUN DE SILVA

## Senior Software Engineer

Colombo, Sri Lanka  
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## Summary

Software Engineer with 5+ years of experience in cloud native application development and data analytics. Background in architecture, user experience (UX), development and deployment of cloud native applications in production environments. Experience in owning the technical direction of a product area and leading a team of engineers.

## Experience

### Senior Software Engineer

Orion Health

November 2022 to Present

Auckland, New Zealand

### Associate Technical Lead

WSO2

June 2021 to November 2022

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.
- Led another engineer in developing the minimum viable features for Choreo online editor's resource scheduling, within 1.5 months, using Kubernetes and GoLang.
- Eliminated bottlenecks reducing the startup time of the Kubernetes resources of the Choreo Editors by 80% and increasing the overall user experience.
- Reduced the MySQL 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 the implementation of the foundation for Choreo observability within 3 months, with a team of 2 other engineers, creating the backbone of Choreo observability.
- Decreased the cost by 90% for the company, by architecting the Choreo observability storages with data archival into a Data Lake for Machine Learning (ML) use cases.
- Improved debugging experience for users, by revamping the observability instrumentation at Ballerina compiler level, within 1 month, to map the observability data to the source code.
- Minimized the number of bugs Choreo Observability area 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

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- **Programming languages** — Java, GoLang, Scala, Python, JavaScript, TypeScript
- **Frameworks and tools** — Express, React, TensorFlow, Numpy, Pandas, Azure Event Hub (Kafka), Testing (TestNG, Cypress)
- **Storages** — Time-series Databases (Influx DB, Azure Data Explorer), Graph Databases (Orient DB), Data Lakes (Azure Data Lake), Relational Databases (MySQL, MsSQL), Redis
- **Deployment** — Containerization (Kubernetes, Kustomize, Docker), CI/CD (GitOps, Azure DevOps, GitHub Actions), Monitoring (Prometheus, Jaeger)
- **API Protocols** — REST, GraphQL, gRPC
- **Software Development Methodologies** — Agile, DevOps

## Certifications

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- 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

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### 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

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- "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

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English  
Sinhala

