

NADUN DE SILVA

Associate Technical Lead

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EXPERIENCE

Associate Technical Lead

WSO2

June 2021 – Present

Sri Lanka

- Leading several engineers and worked on different aspects of Choreo

Senior Software Engineer

WSO2

July 2019 – June 2021

Sri Lanka

- Led the Observability Team of Choreo & owned Ballerina Observability Area
- Revived the abandoned Ballerina Observability aspects and improved the instrumentation
- Designed Choreo Observability & Ballerina Observability Architectures

Software Engineer

WSO2

Jan 2018 – July 2019

Sri Lanka

- Designed & Developed several Components in Middle-ware & Cloud Projects

EDUCATION

Deep Learning Specialization

DeepLearning.AI

Mar 2021

Score – 100 / 100

B.Sc. (Hons.) in Engineering (Computer Science & Engineering)

University of Moratuwa

2014 – 2017

Sri Lanka

GPA – 3.85 / 4.20 (First Class)

G.C.E. Advanced Level Examination

St. Joseph's College, Colombo 10

2012

Sri Lanka

Z Score – 2.2441

Attained A grades in all Subjects – (Combined Mathematics, Physics, Chemistry, General IT, General English, General Knowledge)

PUBLICATIONS

Journal Articles

- Kumarage, T., De Silva, N., Kuruppu, C., Ranawaka, M., & Ranathunga, S. (2018). Anomaly detection in industrial software systems using variational autoencoders.

Conference Proceedings

- Kumarage, T., Ranathunga, S., Kuruppu, C., De Silva, N., & Ranawaka, M. (2019). Generative adversarial networks (gan) based anomaly detection in industrial software systems. In *2019 moratuwa engineering research conference (mercon)* (pp. 43–48). IEEE.

ACHIEVEMENTS

WSO2 Sustained Outstanding Contribution Award



Exceptional performance in years 2019 & 2020

Placements in Dean's List

6 out of 8 semesters at University of Moratuwa

Global Finalist – Galactic Impact – NASA Space Apps Challenge 2017



Became a Global Finalist for designing a system which was able to identify potential barriers or facilitators to gene migration.

Google Summer of Code 2017



Honorable Mention – WSO2 Internal Hackathon 2017



Finalist – Angel Hack 2016



Finalist – LANHack 2016



Finalist – HackaDev 2015



Finalist – British Council HSBC Youth Enterprise Awards 2015

RESEARCH & DEVELOPMENT PROJECTS

Fault Detection in Complex Systems Research

University of Moratuwa

- Researched on identifying anomalies in Complex Industrial Systems where labeling data is impractical as a precursor to self healing systems.
 - Explored unsupervised machine learning and deep learning techniques for detecting anomalies
 - Developed a Bidirectional GAN based technique for detecting anomalies
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Choreo – Intelligent iPaaS

WSO2

 Dec 2019 – Present

- Researched and implemented optimum ways on collecting, storing & analyzing large volumes of Time-series data
 - Analyzed user activity data Patterns for improving user conversion
 - Led Choreo Observability Team and Oversaw Observability area
 - Designed and oversaw multiple secure, scalable micro-services which formed the control plane
 - Contributed to designing many aspects of the Control Plane & SRE aspects of the Platform
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Ballerina Observability

WSO2

 Dec 2019 – Present

- Researched on the latest techniques on metrics & traces collection
 - Revived the abandoned Ballerina Observability instrumentation
 - Improved Ballerina Compiler Observability Instrumentation at Java byte-code level & Intermediate Representation
 - Researched and improved the performance of Instrumentation to reduce the performance impact in enabling Observability
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Cellery – Cell-based Architecture Implementation

WSO2

 Aug 2018 – Dec 2019

- Researched and implemented the Observability for Micro-service composites in the PoC of Cellery
 - Designed, Implemented & Oversaw Observability aspects of Cellery
 - Led implementation of tooling for Cellery
 - Designed Cellery Hub; a registry for storing Cells based on Docker Registry
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Customer Success Enablement

WSO2

A data-driven approach for decision making to help customer support teams by analyzing customer engagements & their satisfaction.

Stream Processing Extensions for Siddhi

WSO2

Designing and implementing several Siddhi Stream Processing Extensions to calculate the top and bottom values in a data stream within a window.

TECHNICAL SKILLS

- **Languages** — Java, Python, JavaScript
- **Frameworks & Tools** — TensorFlow, PyTorch, Numpy, Pandas, Spring Boot, Git, JMeter
- **Knowledge Domains** — Deep Learning, Fault Detection, Time-series Analysis, Observability, Cloud Computing
- **Data Storages** — Time-series Databases (Influx DB, ADX, Azure TSI), Azure Data Lake, Relational Databases (MySQL)

CERTIFICATIONS

Certified Kubernetes Administrator

The Linux Foundation

📅 Dec 2020

Score — 86 / 100

Certified Kubernetes Application Developer

The Linux Foundation

📅 Jan 2020

Score — 94 / 100

Certification in Computer Networking and Linux Server Administration

Arthur C. Clarke Institute for Modern Technologies

📅 2013

📍 Sri Lanka

EXTRA CURRICULAR ACTIVITIES

- Chess at Anatoly Karpov Chess Club in Colombo, Sri Lanka — Year 2003 – 2007
- Placed first in the Anatoly Karpov Inter Class Chess Tournament 2007
- Editor of the Science Union of St. Joseph's College — Year 2011 – 2012
- Sports — Athletics, Swimming, Karate
- Video Designing — Year 2015 – 2016
- Dancing — Events at Department of Computer Science & Engineering — University of Moratuwa

STRENGTHS

- Hard Worker
- Attention to Detail
- Strong Team Player & Motivator
- Problem Solver

SOFT SKILLS

- Leadership Skills
- Presentation Skills
- Communication Skills
- Time Management

LANGUAGES

Sinhala
English



REFEREES

Available Upon Request