

Kasun De Silva

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42A Kanpur Road, Broadmeadows, Wellington 6035, New Zealand.

PERSONAL STATEMENT

Experienced DevOps/Cloud Engineer (SRE), and a Linux geek. Highly motivated individual. Interested in Cloud and Serverless computing, Distributed Systems, and Microservice architecture.

KEY SKILLS & TECHNOLOGIES

- AWS: (EC2, s3, Lambda, ECS, EKS, Kinesis, Firehose, Glue, Athena, etc.), Google Cloud, Azure
- Docker, Kubernetes
- Terraform, Ansible, Serverless, Puppet
- Git, Jenkins, GitLab, Bitbucket, DevOps Pipelines
- Python, Bash/shell, goLang, C/C++
- Java, J2EE, JSP Servlets, MSF4J (Microservices framework for Java)
- PostgreSQL, MySQL, MongoDB, Apache Cassandra, Spark, Hadoop
- Maven, Hibernate, Spring MVC, Spring Boot
- JavaScript, JQuery, AJAX, Node.js, HTML, CSS
- Web Services, SOA, Middleware (ESB, API Management, IAM, etc), Mule, WSO2

EMPLOYMENT SUMMARY

Senior Engineer - Xero

May 2022 - Present

- I maintain internal production systems that are mission critical for everyday engineering operations.
- Mainly I look after multiple CI/CD instances including 1000s of their build agents.
- Responsible for multiple artifact repository clusters that are running in Kubernetes and multi region.

Senior Platform Engineer - Westpac NZ

June 2021 - May 2022

- Transform monolithic Java applications into multi-module containers.
- Implement deployment manifests for Kubernetes using Helm charts.
- Implement Jenkins pipelines to automate the deployment process.
- Design the CI/CD approach for the application deployment in Kubernetes.
- Design the branch strategy for the application.
- Write Terraform/Ansible scripts as IAC for automating infrastructure provisioning.

Tech Lead (SRE | Cloud) - Qrious Ltd (Spark New Zealand)

June 2020 - May 2021

- Responsible for the SRE team in Qrious.
- Provide the technical leadership and direction for the fellow SREs
- Responsible for all the projects/products from the SRE perspective and providing the correct vision and the motivation to use proper SRE best practices within Qrious.

Site Reliability Engineer - Qrious Ltd.

Mar 2019 - June 2020

Qrious BAU - Implementation and Maintenance of “Datahub” and “Modern Data Platform” products.

- Setting up and maintaining the AWS infrastructure platform using terraform and Ansible (for deployment automation and provisioning).
- Implement Lambda functions with python to achieve key features of the systems.
- Managing Lambda functions using the Serverless framework.
- Setting up and maintaining CI/CD pipelines using GitLab Pipelines.
- Being part of the on-call roster.

Qrious LBS - Maintenance of Location-Based Monitoring System.

- Regular maintenance to the Hadoop HDFS cluster in Spark Internal Data Center using ansible.
- Implementation and maintaining Airflow jobs using Python.

Transpower NZ - Implementation and Maintenance of Situational intelligence platform.

- Setting up and maintaining the AWS infrastructure platform using terraform (for deployment automation).
- Setting up and maintaining the Openshift container platform in AWS.
- Implement Lambda functions with python to achieve key features of the systems.
- Setup and maintain CI/CD pipelines.
- Used Serverless framework as the deployment automation of lambda functions.

Spark Sports - Maintenance and regular updates

- Implement Lambda functions with python to achieve key features of the system.
- Maintain and set up CI/CD practices using GitLab pipelines.
- Used Serverless framework as the deployment automation of lambda functions
- Setting up integration with Datadog for monitoring and alerts.

MyEnviro -(Data Analytics Project)

- Setting up and maintaining the AWS infrastructure platform using terraform (for deployment automation).
- Maintain and set up CI/CD practices using GitLab pipelines.
- Used CloudFront with lambda to deploy NextJs frontend.
- Used Serverless framework as the deployment automation of lambda functions

RBNZ – (Data Analytics Project)

- Setting up and maintaining the AWS infrastructure platform using CloudFormation and Ansible (for deployment automation).
- Maintain and set up CI/CD practices using GitLab pipelines.

Cawthron – (Data Governance Project)

- Setting up and maintaining the Azure infrastructure platform using CloudFormation and Ansible (for deployment automation).
- Maintain and set up CI/CD practices using GitLab pipelines.
- Setup DataFactory pipelines.
- Setup Azure functions to achieve critical features of the platform.
- Use Ansible to provision a set of VMs containing required tools.

Software Engineer (Cloud|DevOps) – Datacom Systems Ltd.

Jan 2018 – Mar 2019

Department of Internal Affairs – Implementation of the Enterprise Integration and API Platform.

- Setting up the (EKS) Kubernetes in AWS, and using terraform for deployment automation.
- Setting up an Openshift container platform in the internal data center.
- Implementation of DevOps Strategies, build pipelines, and release pipelines in Azure / Jenkins.

Chorus – Implementation, and Maintenance of Portal for Fiber Fulfillment Platform.

(<https://portal.chorus.co.nz/>)

- Troubleshoot production issues in the Fiber Fulfillment Platform.
- Regular maintenance of the Mule ESB Platform.
- Regular Maintenance of the Docker components of the Fiber Fulfillment Platform.

Ministry of Business Innovation and Employment – Implementation of Enterprise and API Platform. (<https://api.business.govt.nz/api/>)

- Implementation of containerized dev environment for existing MBIE deployment to use by the developers. Using docker/docker-compose and ansible, ansible-container.
- Development of Ansible playbooks for WSO2 APIM and WSO2 IS.
- Troubleshoot existing production issues for WSO2 components in the MBIE API Platform.
- Maintaining the (DAS) Data Analytics Cluster in the MBIE platform.
- Implementation of build pipelines and release pipelines using AWS services and Gitlab services.
- Implement toolings such as monitoring dashboards, and analytics for the MBIE project using Spring Boot, MongoDB, and Docker/Docker-compose.

Senior Software Engineer (DevOps) - WSO2, Inc.

April 2016 - December 2017

WSO2 Cloud (<https://wso2.com/cloud/>)

WSO2 Cloud is a middleware as a service that provides API Management Services, Enterprise Integration Services (ESB / Data Services / Message Brokers), Identity Access Management Services(IAM), and Device Management (IoT) Services.

- Worked as a Senior Software Engineer (DevOps) in WSO2 Cloud, focusing on Cloud Computing, Distributed Systems, Microservices, and Containerized architecture.
- Involved in Kubernetes infrastructure migration from AWS to GCP.
- Implement the logging feature for WSO2 Cloud using Kubernetes features.
- Involved in developing and maintaining the core platform which provides the capability of running Microservices, Web Services, Data Services, etc of WSO2 Cloud.
- Handled deployments in the pre-prod and production server and support them.
- Enable Ballerina runtime and Ballerina Composer in WSO2 Cloud.
- Maintain and Customize service load balancer (HAProxy) with GoLang to use with WSO2 Cloud.

Consultant - WSO2 Services

April 2015 - July 2015 | March 2016 - June 2016

- I was engaged in consulting services on behalf of WSO2 for enterprise customers and partners in the USA.

Software Engineer - WSO2, Inc.

May 2014 - March 2016

WSO2 Cloud (<https://wso2.com/cloud/>)

- Involved in Middleware and Cloud Management Portal Development using WSO2ESB, WSO2BPS, WSO2DSS, WSO2IS, WSO2APIM, WSO2AS, WSO2DAS, WSO2IOT.
- Involved in Cloud platform development with Java/J2EE, Jaggery, GoLang, Docker, and Kubernetes.
- Implement the base infrastructure for WSO2 Cloud in AWS and provisioning Kubernetes using terraform.
- Involved in cloud support and regular production support.
- Maintaining the data analytics cluster (based on Spark / Cassandra / Hadoop) for WSO2 Cloud.
- Enable WSO2EI (Enterprise Integrator) in WSO2 Cloud.
- Implement horizontal scaling feature for deployments in WSO2 Cloud using Kubernetes features.
- Implementing the load balancer level firewall for deployments in WSO2 Cloud.

Software Engineer - Ontag (Pvt) Ltd.

May 2012 - April 2014

MtoMCash (Developer)

- I was a core developer of this middleware service that enables the transfer of money around the world. It connects with multiple web services provided by several banking enterprises and enables this capability. (J2EE, Web Services, Maven, Spring, Hibernate, Postgresql, AJAX, JQuery, Bootstrap, etc.).

Smart Card Personalization Tool (Developer)

- This is a company native internal app where I was responsible develop the capability of personalizing NXP MIFARE DESFire smart cards. Since DESFire smart cards come as virgin cards, it needs to personalize as the requirements of the applications it's being used, such as loyalty cards, e-wallets, etc. (Java, Smart Card I/O API, APDU protocols).

Smart Furniture Store (Developer)

- I was a core developer of this VR application that gives a virtual reality environment to interact with furniture. People can interact with this application and can design a virtual environment using interesting furniture. (WPF - windows presentation foundation, Zam3D, MySQL).

Interactive Media Framework (Developer)

- I was a developer of this framework which enables to use of Microsoft Kinect with interactive media applications. This can capture movements of the human body and then translate those movements into a set of programmable events. (WPF, Kinect SDK, TUIO protocol).

Net to Phone VOIP Stack (Developer)

- I was a core developer of this Android mobile service developed with SIP technology and protocols to enable communication with other telecommunication media over VOIP technology. (SIP Protocol, Android, Java).

EDUCATION & CERTIFICATIONS

- **B.Sc (Hons) Special in Computer Science**
University of Sri Jayewardenepura, Colombo, Sri Lanka - September 2009 - March 2013

I completed a bachelor's degree in 2013 with Second Class Honors (Upper Division) with a Grade Point Average of 3.2.
- **AWS Community Builder**
Amazon Web Services (AWS) - 2023 - Present
- **Amazon Web Services Solutions Architect Associate**
Amazon Web Services (AWS) - Issued Mar 2020
- **Sun Certified Programmer Java 2 Platform, Standard Edition 5.0**
Sun Microsystems, Inc. September 2009

PERSONAL INTERESTS & HOBBIES

Listening to music, Singing, Playing Bass Guitar / Guitar, Playing Saxophone, Hiking, Sightseeing

REFEREES

Available on request.