## Ashan Pathiranage | Senior Site - Reliability Engineer



in LinkdedIn Github







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Highly motivated Site Reliability Engineer with extensive experience in optimizing system performance, automating infrastructure, and developing innovative solutions using generative AI, machine learning (ML), and deep learning (DL). Proven expertise in designing and managing cloud architectures, particularly on AWS, and implementing robust monitoring tools to ensure system reliability and efficiency. Seeking a challenging role in a forward-thinking organization where I can leverage my skills to drive operational excellence and advance my career.



## **EXPERIENCE**

#### Senior Site Reliability Engineer | GTN Group

April 2024 – present

CI/CD Pipeline Optimization: Streamlined existing GitLab CI/CD pipelines, reducing deployment times and improving release efficiency through automation.

https://gtngroup.com

- Advanced Monitoring & Incident Management: Implemented advanced Datadog monitoring and automated incident response strategies, significantly reducing mean time to resolution (MTTR) and improving system resilience.
- Cost Optimization & Resource Utilization: Optimized cloud resource utilization, leading to cost savings and improved system reliability, while ensuring alignment with business objectives.
- Multi-Region AWS Infrastructure Management: Enhanced multi-region AWS infrastructure, focusing on high availability, scalability, and security, including the implementation of disaster recovery solutions.
- Leadership & Collaboration: Led cross-functional teams to address infrastructure challenges, improving communication between development and operations teams, and mentoring junior engineers in best practices.

#### Site Reliability Engineer | GTN Group

**April 2021 – April 2024** 

- https://gtngroup.com AWS Server Migration & Optimization: Led the migration of servers from Ireland to North Virginia, optimizing AWS resources like EC2, RDS, and VPC for enhanced performance and security.
- Infrastructure Automation: Implemented infrastructure as code (IaC) using Terraform, and integrated Packer and Ansible to automate AMI creation and server configurations, ensuring consistent deployments.
- CI/CD Pipeline Development: Developed and maintained GitLab CI/CD pipelines for Java applications, reducing deployment times and improving reliability through automation.
- Proactive System Monitoring: Configured Datadog for real-time monitoring of critical system metrics, creating dashboards and alerts to enhance system reliability and performance.
- Collaboration & Troubleshooting: Worked closely with development teams to troubleshoot infrastructure issues and conducted root cause analysis (RCA) for critical incidents, driving continuous system improvements.

#### Network Engineering Intern | N-Able (pvt) Ltd

June 2019 - Dec 2019

Contributed to the metro Ethernet project as an engineering intern in the telco team.

Contributed to the enhancement of base station functionality within the SON (Self-Organizing Network) project at N-Able, focusing on self-optimization, self-configuration, and self-healing. https://www.n-able.biz/

#### Management Trainee | Peoples Bank

Dec 2015 - Aug 2016

Developed strong customer relationships by addressing inquiries and providing excellent service, contributing to increased customer satisfaction.



## **SKILLS & INTERESTS**

**Operating Systems** Linux (RedHat/CentOS/Ubuntu), Windows

**Cloud Services** AWS, GCP CI/CD Tools Gitlab, Bamboo

**Infrastructure Tools** Packer, Terraform, Ansible, Docker, Kubernetes

**Programming Languages** Python, Java, JavaScript,

**Frameworks** React.js, Spring Boot, JavaFX, PyQT, fastAPI

**Databases** MySQL, EDB, Oracle

Other Networking Skills, Machine Learning and Deep Learning,

Generative AI



2016-2021

B.Sc (Hons) Engineering in Electronic and Telecommunication | University of Moratuwa

GPA: 3.2

2011-2015

Advanced Level | Richmond College, Galle

3A's Z-Score: 2.3875 District Rank: 37 Island Rank: 325



## **PROJECTS**

#### Al Bruno (Ongoing)

- Developing Al Bruno, a project utilizing generative Al, Machine Learning (ML), and
  Deep Learning (DL) to predict future system failures.
- Integrating a chatbot feature powered by generative AI to provide user support and interact with systems for diagnostics.

# Server Migration in AWS

- Actively participated in AWS server migration from Ireland to North Virginia and Singapore.
- Gained expertise in managing AWS infrastructure and security.

## Datadog Configuration

- Implemented Datadog for comprehensive monitoring, including Application Performance Monitoring (APM), Server Health, synthetic monitoring, and centralized log management.
- Configured custom dashboards, alerts, and monitors to optimize application performance and efficiently troubleshoot issues.

#### GitLab Pipeline Migration

- Successfully migrated pipelines from Bamboo-Bitbucket to GitLab.
- Utilized Terraform and Packer for infrastructure creation and Ansible for configuration management.
- Implemented AWS Auto Scaling for the pipeline components.

## Tools and Applications

#### Monitoring Tool using React.js and Python

- Developed a monitoring tool using React.js and Python to monitor component, process state, port state, and uptime.
- Configured notifications as well.
- Repository: https://github.com/ashankaushanka96/component-checker

#### **iNAV Uploader Tool**

- Designed and developed an iNAV file uploader tool using JavaFX.
- Implemented the tool to upload new iNAV files to multiple servers and backup their old files and restarts the components.



#### **CERTIFICATIONS**

Red Hat Certified System Administrator (Certification ID - 220-087-555)

**AWS Solution Architect Associate Certification (AWS SAA-C03)** 

Network Essentials 1.0 (Cisco Networking Academy)

Completed React and JAVA courses on Udemy.



## **REFERENCES**

#### **Namal Suranga**

Network Architect, nCinga innovations (pvt) Limited

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#### Diluksha Madushan

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