

LAKITH MUTHUGALA

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OBJECTIVE

Full Stack Developer with 7+ years experience building scalable applications using modern frameworks. Passionate about adopting AI technologies, continuously learning, and delivering innovative solutions to complex problems in dynamic environments.

TECHNICAL SKILLS

Programming Languages	JavaScript , TypeScript , Java , Python , Ruby, Kotlin, PHP
Frameworks and Libraries	React, Next.js , Angular , Node.js , Nest.js , Express , Spring Boot, Django, FastApi
Technologies and Tools	AWS , EC2 , DynamoreDB , S3 , Docker , Webpack , REST APIs Redux , React Query , Storybook , Tailwind CSS , Cypress , Jest NgRx , RxJS , GraphQL , Sass
Version Control and CI/CD	Git, Github Actions, Jenkins, Azure CI/CD
Other Skills	Agile Methodologies, Unit Testing, Responsive Design, Problem Solving

EXPERIENCE

Technical Specialist	Jan 2017 - Jan 2019
Wiley Global Technology	Colombo, Sri Lanka

- Led complex system integrations and architectural decisions across multiple Knewton platforms, designing scalable solutions for enterprise-level data processing and analytics. Evaluated and improved existing systems architecture to enhance platform reliability and performance at scale
- Mentored and onboarded new team members through structured knowledge transfer sessions and technical specification development. Led cross-functional research initiatives and provided technical guidance to ensure best practices adoption across development teams
- Implemented sophisticated performance monitoring and optimization strategies using Pendo analytics for usage pattern analysis during peak periods (back-to-school). Conducted advanced JVM tuning, garbage collection optimization, and codebase refinement to address performance bottlenecks in Java services
- Executed comprehensive platform cost analysis and optimization initiatives, identifying underutilized services and implementing resource rightsizing strategies. Optimized AWS S3 storage costs through lifecycle management, storage class transitions, and data archival policies, delivering substantial infrastructure cost reductions

Senior Software Engineer	Jan 2017 - Jan 2019
Wiley Global Technology	Colombo, Sri Lanka

- Developed advanced graph visualization solutions for Knewton Enterprise platform using directed acyclic graphs, enhancing data transparency and partner usability. Streamlined partner graph ingestion processes by identifying system limitations and implementing validation improvements for enhanced efficiency and reliability.
- Resolved critical issues in Knewton Analytics Platform's event-driven message pipeline using Kafka Streams, DynamoDB, and AWS MSK to ensure reliable ordered event processing. Conducted comprehensive load testing with Locust framework and performance analysis to optimize service performance and resolve system bottlenecks.
- Led technical documentation initiatives across Knewton Analytics Platform, Enterprise Platform, and Alta, detailing feature changes, risk assessments, and mitigation strategies. Spearheaded cloud cost reduction initiatives through service optimization and resource allocation analysis, achieving significant operational savings.
- Architected comprehensive monitoring solutions using Graphite, Prometheus, CloudWatch, and Splunk with custom Grafana dashboards. Continuously maintained platform services by upgrading Java, Python dependencies and optimizing JVM configurations to address performance and garbage collection issues.

Software Engineer
Wiley Global Technology

Jan 2017 - Jan 2019
Colombo, Sri Lanka

- **Full-Stack Development and Architecture:** Led development of technical programs for Knewton Enterprise Platform using Java, JavaScript, and Python, adhering to Engineering Best Practices (EBPs) and maintaining code consistency, scalability, and maintainability across multiple technology stacks.
- **Security and Quality Implementation:** Implemented advanced software engineering practices including CI/CD best practices, Git branching strategies, and comprehensive security testing methods (SAST, DAST, IAST), significantly enhancing operational efficiency and code quality.
- **Technical Leadership and Documentation:** Created comprehensive feature documentation and technical specifications for Knewton Enterprise Platform, conducted knowledge transfer sessions for new team members, and contributed to cloud cost reduction through strategic analysis and optimization proposals.
- **Monitoring and Performance Analytics:** Developed Grafana and Splunk dashboards for system performance insights, integrated continuous testing into deployment pipelines using Heroku, and monitored CI/CD pipeline health to ensure minimal disruption and high software quality delivery.

Associate Software Engineer
Wiley Global Technology

Jun 2019 - Jan 2019
Colombo, Sri Lanka

- Led full-stack migration of Ranku platform from Marko.js to React with Next.js server-side rendering, significantly improving SEO rankings and user experience. Orchestrated infrastructure migration from Heroku to AWS using Terraform for Infrastructure as Code, deployed on Amazon EKS with optimized frontend deployment strategies.
- Collaborated with cross-functional teams, including QA, clients, and offshore teams, to deliver high-quality solutions within deadlines while adhering to industry best practices and guidelines.
- **Quality Assurance and Testing:** Enhanced testing protocols by implementing UI testing frameworks, synthetic monitoring with Dynatrace, and comprehensive test suites using Jest, RTL, Sinon, Selenium for real-time monitoring and issue resolution

Trainee Software Engineer
Arimac

Feb 2018 - April 2019
Colombo, Sri Lanka

- Strengthened full-stack development skills by contributing to real-world projects using Spring Boot, JAX-RS, and Vue.js, delivering production-grade solutions for enterprise clients.
- Collaborated in cross-functional agile teams, improving teamwork, problem-solving, and analytical thinking while meeting tight project deadlines.
- Contributed to 5+ live projects, including high-impact platforms like NDB NEOS (digital banking) and Govi Mithuru (agri-tech dashboard).

PROJECTS

Knewton Enterprise - Technical Specialist Contributed to developing a large-scale adaptive learning platform built on Netflix microservices architecture, using Thrift RPC for internal service communication and REST-based edge services for external integrations, ensuring high scalability and performance. ([Try it here](#))

Knewton Alta Platform - Technical Specialist. Worked on the Knewton Alta LMS, an intelligent learning platform that powers adaptive assignments and assessments, leveraging Kubernetes and Kube DNS for microservice orchestration and service discovery, with LTI 1.3 and OAuth integrations for seamless LMS connectivity. ([Try it here](#))

Ranku — Full Stack Developer Developed and optimized an online education marketing platform that enhanced organic and referral SEO performance, helping universities boost student enrollment through data-driven insights using Node.js, MongoDB, and Salesforce.

Oculyze — Full Stack Developer Built and enhanced AI-powered microscopy frontends using ReactJS, Redux, and D3.js, enabling real-time image analysis for lab automation and scientific accuracy. ([Try it here](#))

EDUCATION

Bachelor of Computer Science, Plymouth University

2016 - 2019