# Mohammad Afzal

Lead Cloud Engineer | Senior DevOps Engineer | Product Development Engineer   
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## Summary

**Lead Cloud Engineer at Technumen** with 9+ years of experience in designing, building, and maintaining scalable, cloud-native systems. Specialized in **AWS infrastructure (EC2, Lambda, S3, RDS)**, **containerization (Docker, Kubernetes)**, and **CI/CD automation** using tools like **GitHub Actions**, **Jenkins**, and **GitOps workflows**. Strong backend development background in **Java**, **Kotlin**, and **Python**, enabling seamless integration between application development and deployment pipelines. Proficient in **Infrastructure as Code (Terraform)**, **observability tooling** (Prometheus, Grafana, ELK), and **DevSecOps best practices**. Experienced in enabling ML Ops using **MLflow**, **SageMaker**, and **Kedro**, supporting real-time model deployment and lifecycle automation. Adept at leading cross-functional teams, optimizing build and release processes, and delivering high-availability systems for product and service-based organizations. Active contributor on Stack Overflow (8,000+ reputation), with a passion for clean architecture, automation, and developer enablement.

## Technical Proficiencies

**Cloud Platforms:** AWS (EC2, Lambda, S3, RDS, EKS, CloudWatch, Step Functions), GCP (basic), Serverless Framework

**Infrastructure as Code (IaC):** Terraform, AWS CloudFormation (basic), Kubernetes Manifests, Helm Charts

**Containerization & Orchestration:** Docker, Kubernetes, Docker Compose, Helm, Amazon EKS

**CI/CD & Automation:** GitHub Actions, Jenkins, GitLab CI/CD, GitOps workflows, Shell scripting

**Programming & Scripting:** Python, Kotlin, Java 17, Bash, JavaScript (basic)

**DevOps & Monitoring Tooling:** Prometheus, Grafana, ELK Stack, CloudWatch, Fluentd, Nginx, Kafka

**Source Control & Dev Tools:** Git, GitHub, Bitbucket, GitLab, Linux CLI, VS Code, IntelliJ, Postman

**ML Ops & Data Pipelines:** MLflow, SageMaker, Kedro, Pandas, JupyterLab, Scikit-learn

**Testing & Quality Automation:** JUnit, PyTest, Cucumber, Postman, Selenium (basic), BDD frameworks

**Databases & Storage:** PostgreSQL, MySQL, MongoDB, Redis, Snowflake (basic), S3

## Experience

### Lead Cloud Engineer, Technumen | 2024 - Present

* Oversaw the integration of advanced cloud services, including serverless computing models like AWS Step Functions with Lambdas, to optimize operational efficiency and reduce costs.
* Led the development of scalable microservices using Java and Spring Boot, integrating Kafka for efficient message processing and AWS for robust cloud infrastructure.
* Streamlined deployment processes with Docker and Kubernetes, implementing CI/CD pipelines using Jenkins to ensure rapid, reliable delivery.
* Developed dynamic web interfaces using ReactJS, ensuring seamless integration with backend systems to enhance user experience and system performance.

### Product Development Engineer, Calibo | 2020 - 2023

* Lead the development of scalable web applications in a microservice architecture using Java, Spring Boot, and Hibernate.
* Collaborate with cross-functional teams to understand requirements and deliver high-quality features to production.
* Architect and implement DevOps practices, leveraging Docker, Kubernetes, and Jenkins for continuous integration and deployment.
* Utilize **AWS** services such as **EC2**, **RDS**, and **Sagemaker** to build robust and scalable cloud solutions.
* Work closely with stakeholders to gather feedback, optimize application performance, and ensure smooth product delivery.

### Senior Associate, Nagarro | 2019 - 2020

* Led the digital transformation of project development by developing web applications using **Spring Boot**, **RabbitMQ**, **Angular 8**, and **Postgresql**.
* Collaborated with a team of engineers to design and implement scalable microservices architecture.
* Ensured high code quality and adherence to best practices through code reviews and automated testing.
* Actively participated in agile development processes, including sprint planning, daily stand-ups, and retrospective meetings.

### Senior Software Engineer, Enbraun | 2015 - 2019

* Developed multi-user resource management and scheduling software using **JavaEE**, **AngularJS**, and **Restful services**.
* Designed and implemented RESTful APIs for seamless integration with external systems.
* Collaborated with clients to gather requirements, provide technical guidance, and deliver custom solutions.
* Led the migration of legacy applications to modern technologies, resulting in improved performance and user experience.

### Freelancer | Before 2015

* Successfully completed various freelance projects, including web application development and customization based on client requirements.
* Collaborated closely with clients to understand their needs and deliver tailored solutions within agreed timelines.

## Project Profile

### LAZSA – Product Platform-as-a-Service

Industry-first Product Platform-as-a-Service (pPaaS) to redefine digital innovation and drive competitive advantage through digital business. The platform provides a comprehensive set of tools and technology stack to efficiently manage, define, design, develop, and deploy phases of product development.

Key Contributions:

* Led a team in the development and implementation of core features, ensuring successful delivery to the production environment.
* Collaborated with stakeholders to understand requirements and made architectural decisions to ensure the platform's scalability and performance.
* Implemented Java8, Spring Boot, AWS services, Kafka, ReactJS, Docker, Kubernetes, Jenkins, **Sagemaker**, **MLFlow**, **Kedro**, and **ELK** for seamless development and deployment.

### DiPEC (Digitalized Project Execution)

Web application created to digitalize project development, utilized by engineers of Siemens. The project involved team leadership and development from the initial stages. The application was developed in a microservices architecture, ensuring scalability.

Key Contributions:

* Led a team in the development of features and functionality, meeting project deadlines and ensuring high code quality.
* Leveraged **Spring Boot**, **Kafka**, Angular 8, Postgresql, and Material UI to deliver a robust and user-friendly application.

### eResource Scheduler

Enbraun's eResource Scheduler is a multi-user feature-rich software for resource management and scheduling. The application enables organizations to efficiently schedule, plan, and manage employees, equipment, and other resources.

Key Contributions:

* Developed RESTful services, utilizing AngularJS, Bootstrap, OAuth2, and JavaEE to create a comprehensive resource management solution.
* Collaborated with clients to gather requirements, design customizations, and provide technical guidance.
* Implemented user-defined fields, booking charts, time sheets, and other advanced features to enhance resource management capabilities.

### Abho Costing Sheet

Web application designed to manage costing in the fashion designing industry. The application enables management of clients, fabrics, labor costs, dyeing, overheads, and provides precise cost analysis.

Key Contributions:

* Developed RESTful services using AngularJS, Bootstrap, Servlets, Java EE, and Wildfly to create a user-friendly and efficient costing management application.
* Implemented role-based access control to ensure appropriate authorization for different application components.

## Education Detail

**Master of Science** in Data Science from Liverpool John Moores University (Distance)

**Post Graduate Diploma** in Data Science from IIITB Bangalore (Distance)

**Bachelor of Technology** in Computer Science from Uttarakhand Technical University

**Higher Secondary School** from Modern School Rishikesh (CISCE)

**High School** from Modern School Rishikesh (CISCE)