# **Mohammad Afzal**

Python Developer | Data Science Specialist | Full-Stack Engineer  
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## Summary

Data-focused Product Development Engineer with over 8 years of extensive experience in Web Application Development. Proficient in full-stack development, with expertise in Python and a strong background in data science. Skilled in building scalable applications using Python frameworks, implementing data pipelines, and leveraging machine learning libraries. Experienced in working with AWS Services, integrating payment gateways, and managing Linux Systems. Successfully developed and deployed data-driven applications in various industries. Actively engaged on stackoverflow.com with a reputation of over 8000 points. Passionate about leveraging Python and data science techniques to drive insights and create innovative solutions. Accomplished hobbyist guitarist.

## Technical Proficiencies

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

**Backend Development**: FastAPI, Flask, Spring Boot, Hibernate

**Frontend Development**: ReactJS, AngularJS

**Database Systems**: PostgreSQL, MySQL, MongoDB, Snowflake

**Cloud Services**: AWS (EC2, RDS, S3, Lambda), Azure, Databricks, Amazon SageMaker

**Data Engineering and Workflow**: Kedro, Apache Kafka, Qlik Sense

**Machine Learning and Data Science**: TensorFlow, Scikit-learn, JupyterLab, MLflow

**DevOps Tools**: Docker, Kubernetes, Jenkins, Git

## Experience

Full Stack Developer, Northern Trust | 2023 - Present

* Integral in building and maintaining microservices architecture, including essential components like Config and Eureka Servers.
* Led security enhancements and implemented Azure AD-based SSO across multiple services, ensuring robust access control.
* Engineered CI/CD pipelines via GitHub, optimizing development and deployment processes.
* Performed comprehensive unit and performance testing using Pytest and JMeter, respectively, guaranteeing system reliability and efficiency.
* Utilized BDD with Behave to ensure software development was in line with business objectives.

Product Development Engineer, Calibo | 2020 - Present

* Lead the development of scalable web applications in a microservice architecture using Python, FastAPI and SQLAlchemy.
* 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 FastAPI, 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

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, RabbitMQ, 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

**Post Graduate Diploma** in Data Science from IIITB Bangalore

**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)

## Achievements

* Qualified GATE Examination in 2015
* Topped in an error rectification competition organized in RBMI college
* Secured Third position in a software development competition organized in RBMI college
* Designed theme for my college's website