AMADOU JALLOW

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JAVA SOFTWARE ENGINEER

Results-driven Software Engineer with 5 years of experience building scalable web and mobile applications, specializing in Java backend and full-stack development. Delivered solutions across e-commerce, edtech, HR, and small business platforms. Skilled in designing RESTful APIs, integrating third-party services, and optimizing performance. Proficient in Java, Spring Boot, React, Next.js, PHP, PostgreSQL, and CI/CD using GitHub Actions and Docker. Experienced in Agile and all phases of the SDLC.

Microservices and Modular Application Design

 Database Design and Management
 Clean Architecture
 Performance Optimization and Scalability
 Dependency Injection and Inversion of Control

Languages: Java, JavaScript Web: HTML, CSS, JavaScript, React, Tailwind CSS, Bootstrap, jQuery, AJAX, Node.js Web Services: REST, GRPC, GRAPHQL, SOAP, API Gateways, JWT, CORS, OAuth 2.0 Web/App Servers: Apache, Tomcat Frameworks: Spring Boot, Express, Next.js, JUnit, React Native Databases: MySQL, PostgreSQL, MongoDB, Redis Design Patterns: Singleton, Decorator, Factory Method, MVC, Producer-Consumer, Proxy Pattern, Builder Pattern SDLC: Waterfall, Agile, Scrum, DevOps Tools: Maven, Eclipse, IntelliJ IDEA, Docker, Visual Studio Code (VS Code), Git, Jenkins, Jira, Trello, Webpack, Axios, Socketlo, Mocha, Jest, Swagger, Postman, Eslint Platforms: Windows, Linux (Ubuntu), Amazon Web Services (AWS), Heroku Application/Software: Zoho CRM, WordPress, Mailchimp, PayPal, Stripe, Strapi (Node.js CMS)

PROFESSIONAL EXPERIENCE

CAREER NOTE: Completed on-campus studies and currently taking distance education courses to complete a **Master's Degree in Computer Science** (Available for full-time, W-2 employment).

AFROSOFTTECH, Serrekunda, Gambia • 12/2020 – 06/2024

A software development company that specializes in IT consultancy, software solutions, web design, and hosting.

Software Engineer

Architected Scalable Marketplaces and Learning Platforms on Cloud Infrastructure.

- Built scalable backend services for Raba Raba marketplace with Java and Spring Boot, enabling secure auth and Swagger docs, boosting API adoption by 35%.
- Integrated AWS S3 for media file storage and utilized Redis for session management and caching, reducing load times and improving user session consistency by 40%.
- Implemented secure user authentication and role-based authorization using Auth.js, JWT, and Clerk, leading to a 20% decrease in unauthorized access incidents.
- Architected asynchronous services using Java, RabbitMQ and Kafka for real-time communication and queue management, enabling high-throughput task processing for the users.
- Ensured system reliability through comprehensive unit and integration testing using JUnit, Jest, and Mocha, maintaining >80% code coverage.
- Containerized services using Docker and streamlined developer onboarding with consistent local environments, reducing setup time by 50%.
- Set up CI/CD pipelines via GitHub Actions and managed Agile workflows using Jira, accelerating release cycles and improving sprint velocity.
- Independently built the <u>Lern Das</u> platform from the ground up, architecting both the frontend and backend with Next.js and Node.js(Strapi) to deliver a robust and cohesive full-stack solution.

<u>Technologies Used:</u> Java, Spring Boot, Hibernate, PHP (Slim), Node.js (Strapi), Next.js, Tailwind, Kafka, Docker, AWS, Heroku, GitHub Actions, Postgres, MySQL, MongoDB, Redis, Swagger, Jest, JUnit, Mocha, OAuth, JWT, Clerk.

OWERA LTD, Ruislip, England • 03/2020 - 08/2020

A software and marketing company.

Backend Engineer

Designed Secure APIs for E-Learning Platform with Scalable Media Delivery.

- Engineered RESTful APIs for the Owera e-learning platform using PHP and Slim Framework, improving API responsiveness and enabling seamless integration with the React frontend.
- Implemented JWT-based secure authentication and authorization to protect premium content, ensuring user access control and data privacy compliance.
- Optimized PostgreSQL database queries and schema, resulting in a 30% improvement in backend performance under concurrent user load.
- Connected AWS S3 for scalable and secure video and material storage, ensuring high availability and fast content delivery.
- Ensured backend reliability by writing unit tests in PHPUnit and validating APIs through Postman, reducing postdeployment bugs by 25%.

Technologies Used: PHP, PostgreSQL, React, JWT, AWS, Docker, PHPUnit, Git, Stripe, Redis, jQuery, Jest, Node.js.

INSIST GLOBAL, Kairaba, Gambia • 10/2019 – 03/2020

A tech company specializes in IT consultancy, software solutions, web design, and hosting enhanced digital experiences. **Software Developer**

Developed reporting systems for an EdTech ERP platform, and engineered secure, scalable APIs for a financial management system.

- **Developed and scaled RESTful APIs** using Ruby on Rails, powering seamless integration across multiple education modules and enabling secure backend data flows for academic operations.
- Automated report card generation with PDFKit and Jasper templates, replacing manual workflows with dynamic PDF outputs and cutting reporting time by over 70% across student and teacher dashboards.
- **Optimized search and reporting queries** in PostgreSQL and MongoDB to support advanced filtering and aggregation, reducing report latency by 60% and boosting performance of data-heavy teacher dashboards.
- **Revamped frontend components** using React, Material UI, and jQuery, unifying design systems across academic and business platforms and contributing to a 25% uplift in user satisfaction scores.

<u>Technologies Used:</u> Ruby, Ruby on Rails, JavaScript, React.js, React Native, MongoDB, PostgreSQL, MariaDB, Redis, Chart.js, Material UI, jQuery, PDFKit, Postman, Jest, RSpec, Axios, Docker, Git, GitLab, RubyMine.

Maharishi International University (2025)

ACADEMIC PROJECTS

- A Blogging Platform: Co-developed a blogging platform using Java, Spring Boot, and Thymeleaf, with a microservices architecture for modularity. Integrated Kafka for real-time, asynchronous communication, enhancing performance and user experience.
- Personal Blogging Platform: Independently built a full-stack blogging platform with a minimal UI and robust post management features. Developed RESTful APIs using Node.js and Express, and a responsive frontend with React, TypeScript, and Jotai for real-time interaction and smooth user experience.
- Math Game: Built a serverless web math game with Java, React and AWS, featuring timed quizzes, Cognito auth, real-time leaderboards, and Lambda-based score tracking. Used SES for notifications and automated CI/CD with Terraform and CodePipeline.

EDUCATION

Master of Science in Computer Science

(In progress via distance education; expected completion 06/2027) Maharishi International University, Fairfield, Iowa

Key Courses: Algorithms, Cloud Computing, Web Application Programming, Enterprise Architecture

Bachelor of Science in Computer Science

Delhi University, New Delhi, India (06/2019)