MAMADOU KONE

Fairfield, Iowa 52557 • +1-641-233-0071 • mamadou544kone@gmail.com https://www.linkedin.com/in/mamadou-kone-3b1694b9/

JAVA DEVELOPER

Dedicated and results-driven Software Engineer with 2 years of professional experience specializing in Java, Spring Boot, and React.js. Proficient at designing, developing and maintaining Restful web services, and designing dynamic and responsive user interfaces to deliver seamless and efficient software solutions. Proven track record of working in agile environments, collaborating effectively with cross-functional teams, and consistently meeting project deadlines and quality standards. Committed to continuous learning and staying updated with the latest industry trends and technologies to drive innovation and improve application performance.

Version Control • Domain Driven Design • Microservices • Containerization • Architectural Patterns SOLID Principles • Data Structures • Object Oriented Programming (OOP) • Team Collaboration • Problem Solving

Languages: Java, Python Web: HTML, CSS, JavaScript, jQuery, NodeJS, ReactJS Web Services: REST Web/App Servers: Nginx, Tomcat Frameworks: Spring Boot, Spring Data, Spring Security, Hibernate, JDBC Databases: MySQL, PostgreSQL, MongoDB Design Patterns: Strategy, Composite, Command, Decorator, Observer, Adapter, Singleton, Iterator, Visitor, Facade, Proxy, Visitor, Template method, Factory **SDLC**: Agile, Waterfall Tools: Intellij, Eclipse, VSCode, Kafka, ActiveMQ, Postman, Swagger, Splunk, Elasticsearch, Logstash, Kibana, Zipkin

Platforms: Windows, Linux

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).

KAMTAR AFRIKA, Abidjan, Cote d'Ivoire • 01/2022 – 10/2023

An online platform for booking trucks for transporting goods across West Africa.

Full Stack Developer

Built, maintained, and tested software systems.

- Implemented a new user interface using React and Redux Toolkit, which increased online orders by 20%, significantly enhancing user experience and driving higher sales.
- Created real-time reporting systems for the Billing and Collection Team, enabling immediate access to account information and enhancing decision-making efficiency using Spring Boot, MongoDB, React.js, React D3.
- Utilized Spring Boot, Spring JPA and MySQL to automate the integration of driver payments into our system from Excel files generated by a mobile money payment system, significantly reducing manual data entry and enhancing data accuracy.
- Designed and implemented an attendance tracking system for daily wage employees using Spring Boot, Spring Data JPA and Spring Security resulting in enhanced accuracy, reliability and transparency of attendance data, achieving 50% reduction in manual attendance tracking errors and an increase in administrative efficiency.
- Developed and launched a mobile application using React Native for daily wage employees to record their attendance, significantly improving data accuracy and user convenience, and reducing administrative workload.

Technologies Used: Java, Spring, React, MySQL, JavaScript, React Native, Node, Junit, Mockito, Grafana, Prometheus, Jenkins, Docker, AWS, Kubernetes, splunk

INTERNSHIP EXPERIENCE

EDUREKA, Bangalore, India • 05/2021 - 11/2021 Online training platform.

Intern Web Developer

Built frontend and backend applications.

- Built robust, scalable, and efficient RESTful web services for a food delivery application using Node.js
- Integrated MongoDB and optimized queries resulting in fast retrieval and storage of application data
- Implemented secure user authentication and authorization mechanisms using JWT and encrypting user credentials using Bcrypt reducing vulnerabilities.
- Developed and executed unit and integration tests to ensure code quality and reliability using testing frameworks like Mocha and Chai.
- Collaborated with front-end developers to integrate APIs with React.js components, ensuring seamless user experience.

Technologies Used: JavaScript, NodeJS, ReactJS

ACADEMIC PROJECTS

Banking Applications Framework 2024: Developed a framework to implement banking applications with customizable templates for credit card and banking systems. It uses the strategy design pattern to compute interest rates for various accounts, the factory method pattern for creating different account types, and the observer design pattern for sending notifications. The framework abstracts subsystem functionalities into interfaces using the façade pattern and defines transactions as rules to be applied to accounts using the rules pattern. This approach reduces development time, enhances reliability, and supports secure, user-friendly banking solutions.

Attendance and Course Registration System 2024: Designed and implemented microservices for attendance and course registration systems using Spring Boot, MySQL, JPA, Spring Security, Kafka, API Gateway, Feign, Eureka Server, Resilience4j, Grafana, and Prometheus. The system employs Spring Boot for scalable microservices architecture, with MySQL and JPA handling robust data management. Spring Security ensures secure authentication and access control, while Kafka provides efficient message brokering. API Gateway and Feign enable seamless communication between services, and Eureka Server offers service discovery. Resilience4j enhances fault tolerance, while Grafana and Prometheus facilitate monitoring and performance tracking, resulting in a highly scalable, secure, and resilient system.

Blog posting System 2024: Developed a blog posting system using Node.js, Express, MongoDB, CSS, HTML, jQuery, and EJS. Node.js and Express provide a robust server-side framework, enabling efficient routing and middleware management. MongoDB serves as the database for flexible and scalable data storage. The front end is built with HTML and styled using CSS, while jQuery is utilized for dynamic content updates and interactive features. EJS templates are used to render server-side data into HTML, ensuring a seamless and responsive user experience. This architecture delivers a powerful, user-friendly platform for creating and managing blog content.

PERSONAL PROJECT

Online Electronics Shop 2023: The platform allows users to browse, search, and order a wide range of electronic products. It features an intuitive home page, advanced product filters, and high-quality detail pages. Customers can manage shopping carts, place orders, and maintain personal accounts with order histories. The admin interface offers robust product, order, and user management, along with analytics and reporting tools. Using React.js, Redux for the frontend and Spring Boot, MySQL, MongoDB for the backend, the system follows the CQRS (Command Query Responsibility Segregation) pattern to enhance performance and scalability. This ensures efficient handling of commands (e.g., placing orders, updating information) and queries (e.g., fetching product details) even under high loads.

EDUCATION

Master of Science in Computer Science

(In progress via distance education; expected completion 06/2026) Maharishi International University, Fairfield, Iowa

Key Courses: Web Programming, Software Architecture, Advanced Software Development, Enterprise Applications

Bachelor of Computer Application in Computer Science Bangalore University, Bangalore, India