

ABDOU LAHI DIOP

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SOFTWARE ENGINEER

Highly motivated software engineer with 6 months of hands-on experience as a backend developer with Erlang underpinned by 2 years of apprenticeship as a Software Developer and, additionally, 8 months of project-based experience. Proficient in Java, JavaScript, Python, C, and Erlang, with expertise in utilizing frameworks such as React, Angular, Express, and Spring. Skilled in various tools and platforms, with a strong understanding of the software lifecycle and Agile methodologies.

Software Development Life Cycle • Web Services • Design Patterns • Object Oriented Programming • Service Oriented Architecture • Dependency Injection • Functional Programming • Multi-threading

Languages: Java, Python, Erlang

Web: HTML5, CSS, JavaScript, React.js

Web Services: REST, SOAP

Web/App Servers: Tomcat

Frameworks: Express, Spring, Spring Boot, Spring Security, Angular, Node

Databases: MySQL, MongoDB, PostgreSQL

Design Patterns: Singleton, Observable, Factory

SDLC: Agile, Scrum

Tools: Visual Studio Code, Eclipse, IntelliJ, Maven, NPM, MySQL Workbench, Postman, git, shell, Docker, JIRA, Kanban board

Platforms: Windows, Linux

Big Data: Hadoop, HDFS, GCP

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).

MYRIAD CONNECT, Dakar, Senegal • 01/2022 – 07/2022

USSD technology specialist, empowering enterprises to deliver new mobile services.

Software Engineer/Backend

Built USSD services.

- Collaborated with the mobile operators and the project manager to validate, finalize, and estimate the workload needed.
- Developed services following a specification document or a JIRA ticket.
- Created useful plugins using Erlang to reduce the development process by 50%.
- Supported deliveries using CI/CD to provide the best possible quality of service for many clients around the world.

Technologies Used: Erlang, Python, SOAP, REST API, SQL

ORANGE SN, Dakar, Senegal • 07/2019 – 09/2021

One of the world's leading telecommunication operators.

Software Developer – Apprenticeship / Full-time paid

Assigned to Big Data Department

- Created end-to-end applications workflow diagrams using UML and across functional and application architectures.
- Developed backend as well as frontend applications using Spring Boot, Angular, and PostgreSQL.
- Used Scrum methodology for the development process.
- Deployed the backend part in Kubernetes on Google Cloud Platform.
- Documented and Submitted reports related to projects and work.

Technologies Used: Python, Spring Boot, HTML, CSS, JavaScript, Ionic, Firebase

ACADEMIC PROJECTS

Maharishi International University (2023) Property Management Portal:

- Implemented the admin dashboard using React, focusing on seamless user experience.

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- Collaborated on backend design using UML class diagrams for clear structure.
- Orchestrated the backend development for admin tasks using Spring Boot, ensuring secure and efficient handling of server requests (login, queries, filters).

Technologies Used: *Java, Spring, HTML, CSS, JavaScript, React, SQL*

Maharishi International University (2023) Library Management:

- Designed system architecture through UML diagrams.
- Implemented core functionalities using Java and creating an intuitive user interface with JavaFX.
- Enhanced the user experience and overall efficiency of library services.

Technologies Used: *Java, JavaFX*

Maharishi International University (2023) E-shop:

- Leveraged HTML, CSS, JavaScript, and Bootstrap to create a comprehensive online store.
- Designed and implemented a user-friendly interface encompassing login, signup, and item access post-login.
- Implemented cart functionality, enabling users to seamlessly add items and manage their selections.
- Incorporated validation mechanisms to ensure accurate and secure data input, enhancing the system's reliability.

Technologies Used: *HTML, CSS, JavaScript, Node, Express*

Ecole Polytechnique de Thiès (Senegal) (2021) Contextual App:

- Designed the project's workflow and architecture, including UML diagrams.
- Implemented the backend using Spring Boot and deployed it as a Docker container on GCP.
- Developed the frontend using Ionic Angular for a mobile-responsive experience.
- Created a fully functional application that adapted to individual user preferences, enhancing engagement and usability.

Technologies Used: *Java, Spring Boot, HTML, CSS, JavaScript, Ionic, Docker, Google Cloud Platform*

EDUCATION

Master of Science in Computer Science

(In progress via distance education; expected completion 10/2025)

Maharishi International University, Fairfield, Iowa

Key Courses: *Web Application Programming, Web Application Architecture, Modern Web Applications, Algorithms*

Master's degree in software engineering

Ecole Polytechnique de Thiès, Thiès, Senegal (09/2021)

Common Engineering Core in STEM

Ecole Polytechnique de Thiès, Thiès, Senegal (07/2018)

CERTIFICATIONS

The Web Developer Bootcamp (Udemy)

Server-side Development with NodeJS, Express and MongoDB (Coursera)

Machine Learning (Coursera)