

Abu Yusuf

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SOFTWARE ENGINEER

Results-oriented Software Engineer with **10+** years of professional experience designing and developing reliable, robust, and highly available applications for the **manufacturing** and **financial** sectors, including 3+ years specializing in LLM and Generative AI. Skilled in building scalable, high-performance web applications using enterprise frameworks like Spring Boot, Spring MVC, REST, and React, applying strong problem-solving and analytical skills. Proficient in Java, Hibernate, Kafka, MySQL, Python, Langgraph, FastAPI, Hugging Face, AWS, and PostgreSQL. Passionate about driving innovation, automation and operational excellence through intelligent AI solutions.

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- **Languages:** Java, Python, Bash, PHP
 - **Web:** React, Angular, Vuejs, HTML, CSS, Ajax, Bootstrap, Tailwind CSS
 - **Frameworks:** Spring, Spring Boot, Spring MVC, JPA, Hibernate, Microservice, Laravel, CodeIgniter, NestJS
 - **Message Brokers:** Apache Kafka, RabbitMQ
 - **Databases:** MYSQL, SQL, PostgreSQL, MongoDB
 - **Dev/Ops:** Docker, Kubernetes, Jenkins, CI/CD
 - **Web Services:** API Development, REST, SOAP, JSON, XML
 - **AI & ML Expertise:** Langchain, Langgraph, CrewAI, llama Index, Generative AI, LLM fine-tuning, AI Agent, RAG, prompt engineering, model evaluation
 - **MLOps:** MLFlow, AWS Bedrock, AWS SageMaker, OpenTelemetry, Langfuse
 - **Vector DBs:** Pinecone, pgvector
 - **Tools:** OAuth 2, AWS, Git, Postman, Numpy, Pandas, Scikit, TensorFlow, Keras, Pytorch, Maven
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PROFESSIONAL EXPERIENCE

Omdena

AI Engineer (04/2025 – 05/2025)

Building an Agentic-Based Mental Health chatbot as a co-leader

- Designed and implemented the workflows, architecture, and pipelines
- Created Event based application to confirm low latency and ensure user friendly interface using technologies using FastAPI, langchain , langgraph and React
- Implemented Speech to Text and Text to Speech features using Whisper and gTTS

FUSE GMBH

Software Engineer (09/2021 – 12/2023)

Build Services using prominent technology in the domain of finance, manufacturing, and tourism.

- Refactored the HR module for the SK web application using Java and Spring to eliminate redundant code, which increased performance 1.5 times.
- Designed the Front end of the Bank website using HTML, Tailwind CSS, and JavaScript, which confirmed a liquid design.
- Developed Backend module for e-shop using Java, Spring, and Hibernate to decrease user profile load latency by 5%.
- Refactor the code of the item module using Java, Spring, and Hibernate to optimize the algorithm and code, increase code readability, and improve performance by 10%.
- Applied Test Driven Development methodology to the user profile and item module using unit testing that increases 100% robustness and reliability.
- Developed a module for dynamic invoice customization, streamlining invoicing workflows, and improving client satisfaction by 100% using Spring Boot microservice

- Developed report module using Spring Boot, Spring Boot security, and ensured faster load by implementing optimized SQL query.
- Developed a middleware to sync and format data between two financial sub-systems using a customized PHP framework, with 100% satisfaction of the client.
- Developed a BigX-tra module with Java, Spring, and Hibernate, ensuring robust, secure, and flawless transactions while integrating with SAP via API.
- Optimized MySQL query for the account transfer and balance module of BigX-tra software by the implementation of a JOIN query to increase performance by 20%.
- Reviewed code for Hotel Info scraping API to increase code readability and follow coding conventions.

Fusion System

ML Engineer (08/2019 – 07/2020)

Developed AI/ML software stacks for various partners, including conducting independent research on Deep Learning for the automotive industry

- Developed an algorithm to measure the distance between the camera and pedestrians using transfer learning and a disparity map shown in a local dynamic map
- Published research findings through technical reports
- A model was developed to identify the cyclist using transfer learning and Python

Yafi Tech

Sr. Software Engineer (02/2016 – 10/2017)

Design and develop web applications based on client requirements.

- Design a module-based system for E-Service using Java and Spring to confirm application security and 20% faster loading of technicians and items in the backend and frontend.
- Refactor the code of a REST-based digital wallet for money transactions using PHP, Laravel, Ajax, and MySQL to ensure 100% acknowledgment.
- Developed module-based data management software for a civil engineering company using Java that secures data transfer between modules with 100% flawless.

4AXIZ IT LTD

Sr. Software Engineer (01/2010 – 01/2016)

- Developed a skeleton for the application construction management system using CodeIgniter that confirms simplicity and increases the system's reusability.
- Developed a store and requisition module for a construction management system using the chunk method of Ajax, resulting in handling lots of data at a time.

EDUCATION

Master of Science in Computer Science

Maharishi International University,

December 2026(Expected)

Fairfield, Iowa

CERTIFICATIONS

[Microsoft Certified: Azure AI Fundamentals](#) (10/2024),

[RMT DA FT 2023-10-16 EN Europe/Madrid EN, Ironhack](#) (12/2023)