

Software Engineer

Results-driven Software Engineer transitioning into Machine Learning and AI development. Skilled in Python, FastAPI, and Streamlit, with hands-on experience building intelligent chatbots using LangGraph, RAG, and Langfuse. Previously specialized in scalable front-end development using React.js, Nuxt.js, and JavaScript. Strong background in agile methodologies, UI/UX optimization, and data-driven applications. Passionate about building intelligent, high-performance systems that solve real-world problems.

Professional Experience

NETSOL Technologies, Pakistan

Jul 2025 - Present

Machine Learning Engineer / Software Engineer, Lahore

- Working in the ML/DS department on real-world AI projects including NLP chatbots and recommendation systems.
- Developed and deployed an intelligent chatbot using Python, FastAPI, Streamlit, and MongoDB.
- Integrated retrieval-augmented generation (RAG) for contextual responses; logged interactions using Langfuse.
- Built interactive dashboards using Streamlit to visualize data from internal sources.
- Performing data wrangling and EDA using Pandas, NumPy, and Matplotlib.

NETSOL Technologies, Pakistan

Jun 2024 - Jun 2025

Software Engineer/Front End Developer, Lahore

- Developed high-performance web applications utilizing React.js and Vue.js, enhancing UI responsiveness and user engagement.
- Optimized development workflows by implementing CI/CD pipelines, resulting in a 20% reduction in deployment times.
- Integrated RESTful APIs for seamless data exchange and communication between frontend and backend systems.

NETSOL Technologies, Pakistan

Oct 2023 - May 2024

Internship Trainee, Lahore

- Designed brand logos and web elements, improving brand consistency by 20%.
- Developed HTML email templates, increasing open rates and engagement by 15%.
- Created marketing materials with Adobe Illustrator to enhance visual appeal, boosting client acquisition by 10%.
- Utilized Mailchimp for targeted email campaigns, effectively increasing subscriber interaction through tailored content.

Projects

NETSOL Technologies, AI Chatbot, Lahore, Pakistan, [Link](#)

Jul 2025

- Built an AI chatbot using Python, FastAPI, and LangGraph, integrating RAG for contextual responses and MongoDB/Langfuse for chat history. Designed a Streamlit UI similar to ChatGPT

Key Achievements

- Built scalable front-end solutions using Nuxt.js and Vue.js, reducing development time by 25% and increasing user engagement by 20%.
- Engineered modular Nuxt.js applications, enhancing maintainability and scalability.
- Designed and implemented high-converting landing pages using JavaScript, boosting conversion rates by 15% through optimized user workflows.
- Created dynamic front-end features with Vue.js, driving a 20% increase in user engagement and a 15% rise in conversions.
- Integrated JWT and OAuth authentication, ensuring secure front-end API interactions.
- Automated testing, building, and deployment by implementing CI/CD pipelines with GitHub Actions, enabling seamless integration and deployment.

Skills & Interests

Machine Learning & Data Science Python, Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, Jupyter Notebook, Streamlit, FastAPI, RAG, LangGraph, Langfuse, NLP, Chatbot Development

Front Development React, HTML & CSS, Bootstrap

Backend Development Node.js

Programming Languages JavaScript

Databases MongoDB

CI-CD GitHub Actions

Accessibility Hard of hearing (HoH) — Proficient in written communication & assistive technologies

Languages English

Education

Virtual University of Pakistan, Lahore, Pakistan, Bachelor of Computer Science in Computer Science, Mar 2018 - Mar 2025

- Hands-on experience in Data Structures and Algorithms (DSA), Object-Oriented Programming (OOP), Java and C++.
- Web Development: Built interactive and responsive web applications using HTML, CSS, and JavaScript.