

Hassan Rauf Butt

Software Engineer

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Berlin, Brandenburg

Software Engineer skilled in backend and full-stack development using React, TypeScript, FastAPI, and MongoDB. Experienced in building scalable, AI-integrated systems, real-time automation pipelines, and cloud-native applications with a strong focus on clean code and CI/CD practices.

Work Experience

Data-Driven Backend Engineer

Feb 2025 - Present

Mylantech | Munich

Developed scalable backend services using FastAPI and PostgreSQL for the Mylantech project, with a focus on AI-driven product features. Implemented asynchronous systems to handle bulk operations efficiently and set up CI/CD pipelines using Docker and Jenkins for seamless deployment. Enabled backend integration of AI models to support real-time automation within the product.

- Automated data cleaning and merging workflows for 100K+ records/month using Pandas, resolving data leakage issues and boosting processing speed by 30%.
- Built backend APIs to seamlessly integrate LLM capabilities into the web platform, enabling real-time AI-driven features and cutting manual reporting efforts by 40%
- Designed and deployed robust forecasting pipelines (Prophet, XGBoost, SARIMA) delivering 18-month predictive insights across multiple product categories, increasing forecast reliability by 25%
- Streamlined processing of structured files and unified timestamp formats across 10+ data sources, enhancing data readiness for analysis and modeling by 60%.

STUDENT RESEARCH ASSISTANT SCIENTIST

Feb 2024 - Aug 2024

ROBOTICS INNOVATION CENTER GERMAN RESEARCH CENTER FOR ARTIFICIAL INTELLIGENCE DFKI

Developed scalable backend systems using FastAPI and MongoDB, optimizing image processing with asynchronous programming. Enhanced AI-driven task scheduling with Google OR tools and contributed to open-source tools for Reinforcement Learning in robotics.

- Developed efficient UIs with TypeScript and Svelte, boosting data acquisition speed by 20% in SeMoSys, and contributed to open-source map annotation tools for Reinforcement Learning in robotics.
- Built an asynchronous image upload and retrieval system using FastAPI and MongoDB GridFS, significantly improving processing speed and responsiveness for concurrent requests.
- Developed a secure, real-time email management app using React, FastAPI, and imaplib, achieving a 30% boost in access speed and 40% increase in retrieval efficiency with IMAP polling.
- Technology Stack : Svelte, TypeScript, FastAPI, Python, MongoDB, Web Sockets, Docker, CI/CD (GitHub Actions), Workflows.

Core Skills

Python, FastAPI, MongoDB, MySQL Docker, Svelt, React, firebase, Github Actions, NoSql, Python, TypeScript, RESTful, API Development, Asynchronous Programming, Flutter, WebSockets, Tailwind CSS, CI/CD (Github Actions)

Education

Brandenburg University of Technology

MASTER Artificial Intelligence

Oct 2023 - Oct 2025