

Ahmed Elarosi

Full-Stack Software Developer | AI Integration & Automation Specialist

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Rosenheim - Germany

Full-Stack Software Developer with 5+ years building scalable web applications and APIs, backed by 10 years in business and finance. Specialized in Python, JavaScript/TypeScript, React, and cloud-native architectures (AWS, Docker, Kubernetes). Expert in creating AI-enhanced automation systems, REST APIs, and data-driven solutions that eliminate manual workflows and deliver measurable business impact.

Core Expertise: Web & API Development • AI Integration • DevOps & Cloud Infrastructure • Data Analytics • Process Automation • Microservices Architecture

Technical Skills

Languages: Python • JavaScript • TypeScript • Java • SQL • R • HTML/CSS • Bash

Frontend: React.js • Streamlit • HTML5/CSS3 • Web Components • Responsive Design

Backend: Flask • Django • FastAPI • Node.js • RESTful APIs • Microservices

AI & Data: LangChain • OpenAI API • ChatGPT Integration • Pandas • NumPy • Tableau • Data Analytics

DevOps & Cloud: AWS (EC2, S3, API Gateway, Lambda) • Docker • Kubernetes • Jenkins • CI/CD Pipelines • GitHub Actions

Databases: MongoDB • PostgreSQL • MySQL • Redis

Tools: Git/GitHub • Linux • Postman • VS Code • Jupyter • Agile/Scrum

Technical Experience

Independent Software Developer & Data Developer, Rosenheim - Germany

May 2024 - Present

- Deliver custom AI-enhanced web applications and APIs for clients across industries, specializing in automation, data integration, and cloud deployment
- Build Python-based automation scripts that reduce manual data processing time by up to 60%, integrating AI tools for document parsing and workflow optimization
- Design and deploy scalable React + Flask/Django full-stack solutions on AWS (EC2, S3, API Gateway) with CI/CD pipelines
- Implement LLM-powered features (ChatGPT API, Hugging Face models) into client applications for intelligent search, content generation, and data analysis
- Provide DevOps consulting: containerization with Docker, orchestration with Kubernetes, and Jenkins pipeline setup
- Established type safety across the full stack by implementing TypeScript on React components and defining schema validation for API endpoints.

Software Developer at Stickx, Rosenheim - Germany

October 2022 - April 2024

- Designed and implemented company-internal REST API-based web applications using Domain-Driven Design (DDD), collaborating directly with end-users to translate business requirements into scalable technical solutions
- Developed Python automation libraries to parse supplier emails and PDF invoices, eliminating manual data entry and reducing processing time by an estimated 50+ hours/month
- Built and maintained integration pipelines connecting external APIs and FTP interfaces, expanding system functionality and enabling real-time data synchronization
- Applied Test-Driven Development (TDD) principles, writing comprehensive unit and integration tests (pytest, unittest) ensuring 90%+ code coverage and system reliability.
- Created database applications (MongoDB, SQL) with optimized schemas for efficient data storage, reporting
- Authored technical documentation and user guides, improving onboarding time for new developers and end-users
- Applied algorithmic problem-solving to automate repetitive business processes, increasing operational efficiency
- Practiced Agile/Scrum methodologies, participating in daily stand-ups and sprint planning to drive product features from requirements gathering to successful deployment in two-week iterations.

Independent Software Developer, Berlin - Germany

January 2022 - September 2022

- Collaborated with start-ups and small businesses to develop and implement web-based solutions.
- Focused on JavaScript development, including MongoDB, Express, React, and Node.js (MERN stack).
- Designed and developed user-friendly web applications, improving user experience and increasing customer satisfaction.

Arabic Outreach Program Manager at Wikimedia Deutschland e. V., Berlin - Germany

February 2019 - January 2020

- Managed cross-cultural, multilingual outreach program coordinating with Arabic-speaking communities across multiple countries and Wikimedia affiliates
- Conducted needs assessment audits to identify documentation gaps and prioritize resource development for partnership, education, and awareness initiatives
- Led a volunteer-driven translation project, producing localized materials aligned with major Wikimedia initiatives
- Developed and launched a centralized Arabic-language on-wiki portal, improving resource accessibility and community engagement

Previous Business & Finance Experience

Co-founder & Operations Manager at Quick Lab, Cairo - Egypt

August 2016 - October 2018

Chief Accountant at Shorakaa For Real Estate, Cairo - Egypt

February 2011 - July 2016

Senior Accountant at Diving Ocean New Project , Marsa Alam - Egypt

September 2008 - January 2011

Key Projects

AI-Powered Document Parser

Built Python application using ChatGPT API and PyPDF2 to extract structured data from invoices, saving 50+ hours/month • Tech: Python, OpenAI API, MongoDB, Flask

REST API with Microservices

Designed domain-driven REST API with Docker containerization and Kubernetes orchestration • Tech: Python, Flask, Docker, Kubernetes, PostgreSQL, AWS

Data Analytics Dashboard

Created interactive Streamlit dashboard for real-time business metrics with automated data refresh • Tech: Python, Streamlit, PostgreSQL, Tableau, Pandas

Education

Full Stack Web & Software Development at Digital Career Institute (DCI), Berlin - Germany

November 2020 - December 2021

B.A. Accounting Science at Ain Shams University, Cairo - Egypt

September 2010

Certificates

Google Data Analytics Professional Certificate from Coursera

October 2025

AWS DevOps Best Practices for Beginners | AWS

October 2024

Languages

Arabic - Native

English - Fluent

German - Proficient

Italian - Basic