Abdullah Bajwa

AI & Full-Stack Developer | Automation & Generative AI Enthusiast Lahore, Pakistan | +92 325- 4749164 | abdullah.bajwa.co@gmail.com LinkedIn | GitHub | Portfolio

Summary

AI-focused software developer passionate about crafting intelligent automation solutions and full-stack applications. Skilled in Python, Django, Flutter, and Machine Learning with proven expertise in deploying advanced AI models, automation pipelines, and project cost evaluation systems like HuBiCEM. Experienced in open-source development, delivering scalable, production-ready AI tools and frameworks with a personal trademark on clean, modular, and maintainable code.

Technical Skills

- Languages: Python, Dart (Flutter), C++, SQL, JavaScript, HTML/CSS
- Frameworks & Libraries: Django, Flask, TensorFlow, Scikit-learn, Flutter, Neo4j, PyTorch
- AI & ML: LSTM, NLP, Attention Mechanisms, Generative AI, Computer Vision
- **Databases:** PostgreSQL, Neo4j, Firebase Firestore
- Cloud & DevOps: AWS (Certified Cloud Practitioner), Docker, Git, CI/CD pipelines
- Others: REST APIs, Agile, Unit Testing, Automation scripting

Education

University of Management and Technology (UMT), Lahore

Bachelor of Science in Artificial Intelligence — 2021 – Present

Professional Experience

Founder & Lead Developer — Bajwa.co

Jan 2023 – Present | Lahore, Pakistan

 Architected and developed multiple AI-powered automation and full-stack applications used by clients and open-source community.

- Created **HuBiCEM**, an innovative developer-centric cost evaluation model leveraging per-developer regression to forecast sprint performance and cost accurately.
- Integrated cloud and containerization best practices ensuring scalable, maintainable AI solutions.

AI Developer & Researcher — EAGLE WINGS (Final Year Project)

Sept 2024 – Present | UMT, Lahore

- Developed an AI personal assistant drone platform featuring facial recognition, autonomous charging, voice commands, and gesture control using Python, TensorFlow, OpenCV, and DJI Tello EDU.
- Enabled real-time drone control and interaction via NLP-powered chatbots.

Selected Projects

HuBiCEM (Hunar Bin Cost Evaluation Model)

- Developed a sprint-based developer performance estimation model with linear regression to individually predict time and cost per developer.
- Automated project forecasting with detailed predictive reports aiding agile project management.(click here)

MCP Excalidraw

- Developed a server enabling large language models to interact programmatically with Excalidraw whiteboards without a structured API.
- Supported operations like creating, modifying, querying visual elements, and Docker deployment.
- Integrated with Claude and Cursor LLMs, expanding LLM interaction with graphical interfaces. (click here)

Stella Chatbot

- Built an intelligent chatbot combining AIML, Django, Prolog, machine learning, and Neo4j knowledge graphs.
- Features web scraping, spell-checking, personalized conversation, and multi-domain NLP capabilities. (click here)

Legal Scraper

• Created an automated scraper for extracting and organizing legal documents and data for research and compliance applications.

Workout Video Classifier

• Built a TensorFlow LSTM-based video classifier achieving 95% accuracy for automated workout classification. (click here)

Stock Pattern Prediction

• Developed an LSTM-based stock market trend prediction model with a 20% improvement in forecasting accuracy. (click here)

MintArt - AI Image Generation Platform

• Created an AI-powered image generation platform integrated with payment gateways to monetize creative AI outputs. (click here)

IoT Home Automation System

• Developed a voice-controlled smart home automation system using IoT devices with 90%+ voice recognition accuracy.

Cuddly Fortnight

• Real-time text prediction dashboard. (click here)

Certifications

- AWS Certified Cloud Practitioner 2023
- Various AI, ML, and Cloud online courses (Coursera, Udemy)

Open Source Contributions

- **HuBiCEM** (GitHub): Core development of a regression-based cost and performance evaluation tool for developers.
- MCP Excalidraw: Lead developer on an LLM-interactive drawing server enhancing AI-human collaborative workflows.
- **Stella Chatbot**: Contributor and maintainer of an AIML + Neo4j chatbot framework for intelligent, personalized assistance.
- Various AI and automation repositories focusing on NLP, vision, and IoT integrations.

Languages

- English (Professional)
- Urdu (Native)

• German (Basic)

Interests

- Automating repetitive tasks and workflows with AI and cloud tech
- Exploring generative AI to enhance software development productivity
- Robotics and intelligent personal assistant systems