

# SYEDA ABIHA AHMED

Full-Stack AI/ML Engineer

Karachi, Pakistan

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[GitHub](#)

[Portfolio](#)

[LinkedIn](#)

## PROFESSIONAL SUMMARY

Full-Stack AI/ML Engineer specializing in production-grade AI systems, cloud-native architectures, and intelligent automation. With **4 completed hackathons** and **15,000+ lines of deployed code**, I build scalable solutions using Next.js, FastAPI, Kubernetes, and modern AI frameworks. Experienced in RAG chatbots, NLP systems, and e-commerce automation with proven deployments on HuggingFace, Vercel, and Kubernetes clusters.

 Available for freelance projects starting February 21, 2026

4

Hackathons

15K+

Lines of Code

5+

Projects Deployed

26

Technologies

## TECHNICAL SKILLS

### Frontend Development

Next.js 16, React 18

TypeScript, JavaScript

Tailwind CSS, HTML5, CSS3

Figma, UI/UX Design

### Backend Development

FastAPI, Node.js

Python 3.13+

PostgreSQL, Neon

SQLModel ORM, RESTful APIs

### AI/ML Integration

OpenAI GPT-4, Agents SDK

Google Gemini, RAG Systems

Qdrant Vector Database

MCP Servers, LangChain

### Cloud & DevOps

Docker, Kubernetes, Helm

Vercel, HuggingFace Spaces

[GitHub Actions CI/CD](#)[Horizontal Pod Autoscaler](#)

## PROFESSIONAL EXPERIENCE

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### Full-Stack AI/ML Engineer (Freelance)

Feb 2026 – Present

**Self-Employed | Karachi, Pakistan**

- Building production-grade AI systems for clients including e-commerce automation and business intelligence
- Developing RAG chatbots with vector databases for customer service automation
- Deploying cloud-native applications using Docker, Kubernetes, and modern CI/CD pipelines
- Integrating OpenAI Agents SDK for NLP-powered CRUD operations and intelligent workflows

## KEY PROJECTS

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### Taskley - AI-Powered Task Management System

**Tech Stack:** Next.js 16, TypeScript, FastAPI, Neon PostgreSQL, OpenAI Agents SDK, Docker, Kubernetes, MCP**Live:** [taskley.vercel.app](https://taskley.vercel.app) | **GitHub:** [ABIHAAHEMD4262/Todo-App](https://github.com/ABIHAAHEMD4262/Todo-App)

- Built multi-phase evolution from console app to cloud-native system with 4 deployment phases
- Implemented AI chatbot with NLP CRUD operations using OpenAI Agents SDK and MCP servers
- Deployed on Kubernetes with Docker containerization, Helm charts, and Horizontal Pod Autoscaler
- Backend: FastAPI with SQLModel ORM, Neon PostgreSQL (serverless), JWT authentication
- Frontend: Next.js 16 with Better Auth, React Hook Form, Zod validation
- Achievement: 12-Factor App compliant, production-ready architecture with graceful degradation

### Humanoid Robotics Educational Platform

**Tech Stack:** Docusaurus 3, React 18, TypeScript, FastAPI, Qdrant, Google Gemini, OpenAI GPT-4o-mini, Python**Live:** [abihaahemd4262.github.io/Humanoid-Robotics-Book](https://abihaahemd4262.github.io/Humanoid-Robotics-Book)

- Created comprehensive educational platform with 18 chapters, 4 modules, 46 hours of content
- Built RAG-powered AI chatbot assistant using Qdrant vector database for semantic search
- Deployed FastAPI backend on HuggingFace Spaces with 768-dimensional Google Gemini embeddings

- Implemented citation system with clickable references for answer grounding
- Scale: 15,000+ lines of code, 45 commits, CI/CD with GitHub Actions

## E-Commerce Platform with Admin Dashboard

**Tech Stack:** Next.js, TypeScript, Tailwind CSS, Sanity.io, Vercel

**Live:** [hackathon-3-template-1.vercel.app](https://hackathon-3-template-1.vercel.app)

- Developed full-featured e-commerce platform with headless CMS integration
- Built real-time admin dashboard for business intelligence, sales tracking, inventory management
- Features: Shopping cart, checkout flow, real-time inventory updates, responsive design
- Deployment: Vercel with automatic deployments and edge functions

## AI Employee for Business Automation (Current Project)

**Tech Stack:** Claude Code, Python, Obsidian, Gmail API, UV Package Manager

- Building autonomous business management system with AI reasoning and human-in-the-loop approval
- Implemented Python watcher scripts for Gmail monitoring with priority detection
- Created Obsidian-based knowledge management with markdown automation
- Designed workflow orchestration for task tracking, approval processes, and audit logging

## EDUCATION

### FSc Pre-Medical

2023 – 2025

Govt. Degree College for Women, North Nazimabad | Karachi, Pakistan

### Certified AI, Web 3.0 & Agentic Computing

In Progress

Governor Initiative for AI & Computing (GIAIC) | Karachi, Pakistan

- Advanced AI/ML engineering concepts
- Agentic AI systems and automation
- Cloud-native application development

## SERVICES OFFERED

### AI-Powered Applications

Custom AI chatbots with RAG systems, NLP interfaces, OpenAI integration, and MCP server development.

**\$1,500 - \$2,500**

### Full-Stack Development

Modern web applications with Next.js 16, TypeScript, FastAPI backends, PostgreSQL databases.

**\$3,000 - \$5,000**

### E-Commerce Automation

AI customer service chatbots, intelligent inventory management, order tracking with NLP.

**\$2,000 - \$4,000**

### Cloud-Native Deployment

Docker containerization, Kubernetes orchestration, Helm charts, modern CI/CD pipelines.

**\$75 - \$100/hour**

## HACKATHONS & ACHIEVEMENTS

- **4 Hackathons Completed** before turning 18
- **15,000+ Lines of Production Code** across multiple projects
- **5+ Production Deployments** on HuggingFace, Vercel, Kubernetes
- **Kubernetes Deployment** with autoscaling and health monitoring
- **RAG Chatbot** with vector database and 768-dimensional embeddings
- **NLP CRUD Operations** using OpenAI Agents SDK

- **CI/CD Pipelines** with GitHub Actions automation

## LANGUAGES

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- **English:** Professional working proficiency
  - **Urdu:** Native proficiency
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All projects are live and accessible via provided links. Code samples available on GitHub.

**Last Updated:** January 2026