

DEYAA AHMED

FULL-STACK, AUTOMATION & AI ENGINEER

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Client reviews from past projects are available on my Freelancer.com profile, feel free to take a look.

Full-stack engineer building **production web apps, anti-bot scraping pipelines, browser automation, and agentic AI workflows**, plus mobile apps end to end. Bachelor's graduate in Computer Science from Cairo University with a **3.45 GPA**. Proven track record of shipping enterprise microservices platforms, adaptive AI-driven learning systems, and high-reliability automation under real production constraints. Passionate about writing clean, maintainable code with comprehensive test coverage. Seeking to leverage strong problem-solving skills and full-stack architecture knowledge to build robust systems that handle high-traffic loads while maintaining data integrity and security.

TECHNICAL SKILLS & EXPERTISE

Backend: Python, Django, Django REST Framework, FastAPI, Async Python

Database: PostgreSQL, Redis, Query Optimization, Indexing

Task Queues: Celery, Redis Broker, Scheduled Tasks, Async Processing

API: REST APIs, JWT, OAuth2, Stripe, Swagger/OpenAPI

Scraping & Automation: Scrapy, BeautifulSoup, Selenium, Playwright, Requests/HTTPX, Browser Automation, Proxy Rotation, Anti-Detection, CAPTCHA Handling

AI Automation: LangChain, CrewAI, n8n, RAG, LLM Integrations, Agentic Workflows

Cloud & DevOps: Huawei Cloud (ECS), Docker, CI/CD, GitHub Actions

Testing: Pytest, Unit Testing, Integration Testing, Mocking

Security: OWASP Top 10, Sentry, Logging, Secrets Management

Core: Data Structures, Algorithms, OOP, Git/GitHub, Linux/Bash

Frontend: HTML, CSS, JavaScript, ReactJS, Tailwind, Bootstrap

KEY ACHIEVEMENTS

- Market Expansion:** Identified untapped markets and launched an automated data collection system, resulting in a **revenue increase of \$1.2 Million** for Morcelle in 6 months.
- Revenue Growth:** Implemented a dynamic pricing API at XarrowAI, increasing deal size by **15%** and market cap by **\$500,000**.
- Performance Optimization:** Reduced API response times by **75%** through database query optimization and Redis caching strategies across multiple client projects.
- ICPC Competition:** Participated in International Collegiate Programming Competition (August 2023), demonstrating advanced algorithmic problem-solving skills.

PROFESSIONAL EXPERIENCE

Full-Stack & Automation Engineer | Masar (Remote)

June 2026 - October 2026

- Architected **Masar**, an enterprise microservices platform automating Saudi visa/Nusuk workflows, now **live in production at masarsync.com**.
- Decomposed the system into **5 independently deployable microservices** (Django backend, React/Vite frontend, OCR, browser automation, sync) behind a single Docker Compose stack.
- Implemented **Kafka/Redpanda event-driven messaging** for asynchronous communication between services, and **Azure Document Intelligence + OpenAI/Gemini** for document OCR processing.
- Built Playwright-driven browser automation for portal workflows and CapSolver-integrated captcha handling, documented across 7 markdown architecture guides for team hand-off.

Full-Stack Engineer | Qatar Securities Co. (P.Q.S.C) (Remote)

March 2026 - May 2026

- Built a suite of **QSE market intelligence tools** for the firm, including a daily Arabic market report generator, a time-weighted portfolio return and risk analytics dashboard, and an ownership-shift tracking tool comparing Qatari, GCC, and Foreign holdings across QSE-listed companies.
- Delivered a **Flask operator dashboard** with a live browser preview and section toggles, replacing a manual Arabic reporting process with a scheduled, presentation-ready daily export.
- Implemented a **TWAR (time-weighted annual return) engine** benchmarking real holdings against the QTRI Islamic Index, and a QSE-specific trading-day calendar engine to keep ownership interval comparisons accurate across Qatar's own holiday and weekend schedule.

Backend Engineer & Web Automation Specialist | Freelancer

Jan 2023 - Present

- Designed and deployed **scalable web scraping architectures** using Python, handling **10,000+ requests/day** with **99.5% success rate** through intelligent rate limiting and proxy rotation.
- Built **RESTful APIs with Django REST Framework** for data delivery, implementing JWT authentication and rate throttling to protect against abuse.
- Implemented **Celery + Redis task queues** for asynchronous data processing, reducing response times by **70%** for large-scale scraping operations.
- Optimized PostgreSQL queries using **EXPLAIN ANALYZE** and strategic indexing, achieving **60% faster** data retrieval for client dashboards.
- Containerized applications with **Docker** and deployed on Huawei Cloud ECS, ensuring environment consistency and **zero-downtime deployments**.

HIGH-VALUE PROJECTS

LearnLab: Adaptive Math Practice Platform | 2026

- Built a Django 5.2 + React 19/TypeScript **Progressive Web App** around the **FSRS-5 spaced-repetition algorithm**, tracking per-subtopic memory state to resurface content exactly when a learner is about to forget it.
- Built an async **PyMuPDF + Gemini AI pipeline** that turns uploaded textbook PDFs into structured, difficulty-tiered questions in minutes instead of weeks of manual authoring.
- Delivered an **educator analytics dashboard** aggregating per-topic retention and mastery so teachers can target review sessions data-first.

Tech Stack: Django, React 19, TypeScript, PostgreSQL, Gemini, PWA

AI-Mutanafison: Islamic Habit Tracker | Live on Google Play | 2026

- Shipped an **Arabic-first Flutter app**, published on the Google Play Store, tracking 8 daily Islamic deeds with globally-shared, realtime community counters.
- Built a **deed-scoped stream lock with a settle window** to keep an offline-first (Hive) client eventually consistent with Supabase Realtime without double-counting or losing state across restarts and network drops.
- Implemented a custom **Fajr-to-Fajr day boundary** and a 30-second polling fallback with automatic Realtime re-subscription.

Tech Stack: Flutter, Riverpod, Supabase, Hive

QSE Daily Report Generator | 2026

- Built a **Flask operator dashboard** for a Qatari financial enterprise, scraping QE and EDAA market data and letting non-technical staff preview and toggle report sections live in the browser.
- Replaced an earlier PDF export with a **Puppeteer/headless-Chrome rendering pipeline**, solving Chromium's flex-layout pagination bugs to produce clean, gap-free multi-page Arabic PDF reports.
- Integrated dual QE/EDAA scrapers and AI-generated Arabic pricing commentary on an **APScheduler-driven daily run**.

Tech Stack: Flask, Puppeteer, Chart.js, APScheduler

EDUCATION

Faculty of Computers & Artificial Intelligence, Cairo University

September 2022 - June 2026

- Bachelor of Computer Science | GPA: **3.45/4.0**
- Relevant Coursework: Data Structures & Algorithms, Database Systems, Software Engineering, Computer Networks, Operating Systems, Artificial Intelligence
- Participated in ICPC Competition (August 2023)
- Led 5+ team projects focusing on backend systems, database design, and API development

ADDITIONAL INFORMATION

- **Languages:** Arabic (Native), English (Professional Working Proficiency)
- **Continuous Learning:** Actively studying advanced Django patterns, microservices architecture, and cloud-native development
- **Availability:** Open to Full-time Backend Engineer Positions and Remote/Hybrid Opportunities
- **Career Focus:** Backend Engineering, API Development, Database Optimization, Cloud Infrastructure, System Architecture