

Mohamed Mayhoub

Software Engineer

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AI-driven Software & Data Professional with hands-on experience in data analysis, AI-assisted software development, and technical instruction. Skilled in using Python, SQL, Power BI, and modern frameworks (Next.js, Nest.js, Angular) to turn ideas into intelligent, data-powered systems. Passionate about vibe coding and integrating LLMs (Cursor IDE, Copilot) to accelerate software creation. Experienced educator skilled at simplifying technical concepts and guiding learners through real-world coding projects.

Education

Bachelor of systems and computers engineering at Faculty of Engineering, Al Azhar University, Cairo, Egypt

October 2020 - July 2025

- Specialized in software development, computer systems, and networks.
- Completed advanced coursework in Programming, Algorithms, Data Structures, Operating Systems, Embedded Systems, and Information Security.
- Graduation Project (Grade: Excellent): Developed a university housing management system to automate application, approval, and service access processes for students.

Work Experience

AI Expertise Trainer at Outlier, Remote

November 2024 - Present

- Evaluated AI-generated responses across domains, ensuring accuracy and coherence for fine-tuning advanced models.
- Designed and optimized prompts to enhance LLM reasoning performance and contextual accuracy.
- Utilized AI-assisted tools (Cursor IDE, Copilot) to automate documentation and evaluation workflows.

Computer Science & Programming Instructor at Toppers, Remote

September 2022 - Present • [↗](#)

- Designed and delivered programming courses (Python, Java, HTML/CSS, Scratch) for diverse learners.
- Created interactive exercises, projects, and coding challenges to improve student engagement and retention.
- Tracked learning progress using LMS systems and provided structured feedback to students.

Data Analysis Intern at Digital Egypt Pioneers Initiative (DEPI)

June 2025 - Present

- Cleaned and analyzed 100K+ records using Python and SQL, reducing preparation time by 40%.
- Designed Power BI dashboards visualizing KPIs, improving resource decision-making by 28%.
- Applied statistical analysis to identify cost-saving trends in case studies.

Data Analysis Intern at Brainwave Matrix Solutions, Remote

July 2025 - August 2025

- Processed and analyzed 5K+ customer tweets with NLP (NLTK, Scikit-learn), achieving 82% accuracy in sentiment classification.
- Built Seaborn visualizations highlighting key customer behavior patterns.

Projects

Sales Performance Analytics • [↗](#)

Created a dashboard aggregating sales data from Excel and SQL, reducing manual analysis time by 50%.

AI Website Builder – (2025) • [↗](#)

Built a full-stack AI system converting text prompts into website layouts. Used Cursor IDE and Copilot to automate front-end generation, reducing development time by 50%.

AI-Powered Math Teacher – Personal Project (2025) • [↗](#)

Developed an interactive web app generating personalized lessons and quizzes using AI-driven explanations.

Sentiment Analysis on Airline Tweets • [↗](#)

Classified 10K+ tweets (82% accuracy) and visualized sentiment distribution using Matplotlib and Seaborn

University Housing Management System – Graduation Project (2025) • [↗](#)

Developed a full-stack web platform to automate student housing processes, from application submission to admin approval and service access.

Skills

Programming Languages: Java, Python, JavaScript, SQL

Frameworks & Web Development: Next.js, Nest.js, Angular, Spring Boot, HTML, CSS, JavaScript

AI & Data: Prompt Engineering, Model Evaluation, Sentiment Analysis, Statistical Analysis, KPI Dashboards

Visualization & BI Tools: Power BI, Tableau, Excel (Power Query, PivotTables)

AI & Emerging Technologies: Vibe Coding, Prompt Engineering, Cursor IDE, GitHub Copilot, LLM Integration.

Teaching & Curriculum Design: Lesson Planning, LMS Management, Gamified Coding Activities, Mentorship

Soft Skills: Analytical Thinking, Problem Solving, Communication, Data Storytelling, Technical Instruction.

Certifications & Courses

Skill-Up: AI & Business from Microsoft, Care Egypt & Ministry of Youth

August 2025 • [↗](#)

Studied AI applications in business analytics and automation workflows using Python and Power BI.

Business Intelligence and Data Analysis from EYouth

August 2025 • [↗](#)

Completed an intensive program covering business intelligence concepts, data analysis methodologies, and data visualization tools to drive informed decision-making. Focused on practical applications using real-world datasets.

AI Starter Kit (AiSK) from ALX Africa

April 2025 • [↗](#)

Practical introduction to AI tools and integrating LLMs into development workflows.

AI Career Essentials (AiCE) from ALX

July 2024 • [↗](#)

Core AI concepts, job readiness, and ethical AI applications.

Regional Champion – ECPC 2022 from ICPC

August 2022 • [↗](#)

Algorithmic problem-solving and competitive programming under timed conditions.

Access Information Online from Ministry of Youth

December 2023 • [↗](#)

Focused on online research, information organization, and using digital tools in education and career development.

EF SET English Certificate from EF SET

July 2024 • [↗](#)

Validated advanced English communication proficiency.

Languages

- **Arabic** - Native
- **English** - Proficient