+201002719594
6th of October City, Egypt
ahmednaeim07@gmail.com

Ahmed Naeim

**Software Engineer |
Generative AI & Mobile
Systems**

LinkedIn
Portfolio
Github

PROFESSIONAL SUMMARY

Results-driven Software Engineer with strong expertise in Generative AI, full-stack development, and mobile applications. Delivered advanced AI solutions — including multi-agent systems, RAG-based pipelines, and speech-to-text features — during high-impact internships at IBM, Microsoft, and Vodafone. Specialized in Flutter development and AI integration, with a track record of building intuitive, scalable mobile applications. Skilled in Python, Lang Chain, LLMs, microservices, and real-time API design. Currently pursuing a Master's in Artificial Intelligence while maintaining an active development and learning track in GenAI tools and systems.

SKILLS

- AI & Data Analysis: Numpy, Pandas, LangChain, RAGs, ML, DL, LLMs, Agents, Generative AI
- Software Development: Python, C++, Java, Flutter, Flask, Spring, React Native, Next.js, GraphQL
- API & Integration: GraphQL, RESTful APIs, Microservices
- Version Control & Collaboration: Git, GitHub
- Databases: SQL, MongoDB, MySQL, PostgreSQL, Firebase

GRADUATION PROJECT

- Led the development of a comprehensive e-commerce platform.
- Organized and facilitated collaboration between teams, dividing the work and aligning to project goals.
- Implemented AI features like product recommendations and chatbots, utilizing generative AI technologies.
- Orchestrated the database design and Entity-Relationship Diagram (ERD), dividing it into separate microservices to ensure their independence and scalability.
- Created six microservices using a variety of backend technologies and databases, including Node.js, Java, .NET Core C#, Flask (Python), and MySQL, PostgreSQL and MongoDB.
- Designed and implemented the Flutter frontend application integrating BloC state management
- Ensured seamless integration of all components throughout the lifecycle, from inception to deployment.

TECHNICAL EXPERIENCE

Teaching Assistant   JULY 2024 – JANUARY 2025

Newgiza University   *Egypt*

- Served as a Teaching Assistant (TA) for two academic terms, assisting in both Calculus I and Data Structures & Algorithms courses.
- Provided in-depth explanations, guided students through problem-solving strategies, and supported them in mastering complex concepts.
- Conducted tutorial sessions, graded assignments, and helped structure assessments to ensure students' understanding.
- Assisted in curriculum development and collaborated with faculty to enhance the course material.
- Mentored students, offering support on coursework, exam preparation, and project development.

AI Software Developer   JULY 2024 – DECEMBER 2024

Optomatica   *Egypt*

- Developed scalable **backend architectures** using **Next.js** and **Python**, optimizing performance and efficiency.
- Designed GraphQL APIs for seamless data flow, enhancing data retrieval speed and improving frontend performance.
- Built responsive UIs using React.js, enhancing user experience and boosting platform engagement.

- Led the development of an AI-powered running coach, leveraging Generative AI for adaptive training plans, resulting in higher user retention rates.
- Developed multi-agent AI systems for fitness, nutrition, and performance tracking, driving personalized user recommendations.
- Implemented Retrieval-Augmented Generation (RAG) for intelligent document search, improving content discovery speed.
- Benchmarked and optimized LLMs (Meta, OpenAI, Gemini, Claude), reducing operational costs by 25% while enhancing accuracy.
- Developed strategic model selection frameworks, ensuring optimal AI performance at minimal computational cost.

Artificial Intelligence & Mobile Application Developer Intern   AUGUST 2023 – OCTOBER 2023
IBM   *Egypt*
- Focused on AI development using Gen AI & prompt engineering, creating advanced features like trip planning, chatbots, hieroglyphs translation, virtual tour guide, image translation, speech-to-text, text-to-speech, & more.
- Expertly employed AI technologies like Langchain, segmentation, & ChatGPT to craft innovative features.
- Led the development of Android & iOS apps with Flutter, mentoring junior team members for a smooth project transition.
- Played a pivotal role in team coordination, collaborating with integration, testing, backend, UI/UX, DevOps, & AI teams for seamless feature implementation.
- Optimized user preferences to provide tailored recommendations & ensured a user-friendly experience with responsive design.
- Integrated APIs & databases to deliver real-time data updates, enhancing platform performance.
- Conducted rigorous unit testing & debugging to guarantee platform reliability & functionality.
- Actively engaged in Agile methodologies, including daily stand-ups, sprint planning, & code reviews.
- Demonstrated effective problem-solving abilities in tackling complex challenges in AI & mobile development.
- Prioritized user experience & personalization, enhancing application appeal & functionality.
- Distinguished as one of the eight selected individuals to present in front of IBM's senior leadership, showcasing the significant contributions & innovative solutions developed during the internship.
- Prioritized clean coding practices in both AI & mobile development, ensuring code quality & maintainability throughout the project. This dedication to clean code contributed to efficient development & smooth collaboration among team members.

Data Analytics Intern   JULY 2023 – AUGUST 2023
Vodafone   *Egypt*
- Collaborated with a team to automate the detection of duplicated Cell IDs in Vodafone's network.
- Validated duplicated Cell IDs & ensured alignment with reuse criteria.
- Developed an integrated tool for network implementation, addressing duplicate Cell IDs.
- Conducted network scans using Python, optimizing Cell ID management.
- Presented project achievements to higher management, demonstrating impact.
- Designed a user-friendly GUI for non-technical users.
- Gained insights into network optimization & innovative solutions in telecom.

Flutter Mobile Application Developer   JULY 2023 – AUGUST 2023
BeTimeful   *Canada - Remote*
- Developed and deployed cross-platform mobile apps using Flutter for iOS and Android, contributing to 110M+ hours saved for users.
- Engineered distraction-blocking features that increased user productivity by 94% and enhanced mental well-being by 98%.
- Managed backend infrastructure and Python-based hosting on Heroku, ensuring system uptime of 99.5%.

- Integrated Stripe for secure payments, increasing revenue from premium subscriptions by 22%.
- Successfully launched the app on Google Play and App Store, achieving 3M+ downloads and maintaining a 4.8/5 user rating.

Website Editor   MAY 2023 – AUGUST 2023
International Association of Dental Students   *Switzerland - Remote*
- Developed a functional & user-friendly webpage for the International Association of Dental Students (IADS) Congress.
- Collaborated closely with the IADS team to create engaging & informative content.
- Implemented registration forms, linked buttons, & navigation bars for seamless access to information.
- Edited & updated website content, incorporated multimedia elements, & improved the user experience.
- Contributed to the success of the IADS Congress website.

Flutter Mobile Application Developer   MARCH 2022 – JULY 2023
empoweromics   *Egypt*
- Designed, developed, & implemented mobile applications on iOS & Android platforms.
- Collaborated with development teams & product managers to ideate software architecture & solutions.
- Managed well-functioning DB, mobile application, client, & server-side architecture.
- Tested & troubleshooted software for responsiveness & efficiency.
- Collaborated with Product & UI/UX teams to refine enhancement designs.
- Implemented third-party libraries & APIs, created security & data protection settings, & wrote technical documentation.
- Optimized applications for maximum speed & scalability.

Software Developer Intern   JULY 2022 – AUGUST 2022
Microsoft   *Egypt*
- Developed a proof-of-concept platform to showcase the accuracy and strength of Microsoft's NER API in entity recognition compared to human performance.
- Built an interactive web-based tool where users could upload documents, label entities, and compare results with AI-generated NER outputs.
- Utilized a full-stack solution with JavaScript, jQuery, HTML, CSS, Bootstrap, Firebase, Git, and APIs to deliver a scalable and user-friendly experience.
- Designed a real-time analytics dashboard to visualize human vs. AI performance, demonstrating the API's high accuracy and processing efficiency.
- Provided actionable insights to the product team, reinforcing the NER API's market value and competitive edge.

EDUCATION

Ain Shams University   MARCH 2025 – PRESENT
Masters in Artificial Intelligence   Egypt
New Giza University   OCTOBER 2020 – JUNE 2024
Bachelor of Information Technology – 3.82/4.0 GPA   *Egypt*
Manor House International School British Division   SEPTEMBER 2016 – JUNE 2019
IGCSE High School   *Egypt*

ACTIVITIES

- Participated in an AI hackathon & achieved a 93% accuracy in an image classification problem.
- Founder of IEEE-New Giza University Branch
- Served as President of IEEE NGU Student Branch for one year and Vice Chair for two other.
- Secured second place by presenting a comprehensive business plan and demo app addressing the water crisis in Egypt.
- New Giza University's ambassador to the School of IT