AHMED GALAL ELZEKY

Microsoft Certified: Azure AI Engineer Associate — AI Engineer — NLP Specialist

 $+201110333933 \mid ahmedgalal11045@gmail.com \mid \underline{gallillio.vercel.app} \mid \underline{github.com/Gallillio} \quad linkedin.com/in/ahmed-galal-123a4a196 \mid credly.com/users/ahmed-galal.bbb8ea95$

EDUCATION

ESLSCA University / Computer Science B.S.

Sep. 2021 - Sep. 2024, Cairo, Egypt

Human Academy / Japanese Language and Business Manner Oct. 2024 - Jan. 2025, Japan(Remote)

EXPERIENCE

AI Engineer, Intelligent Systems I-Sys

Feb. 2025 - Present

- Collaborated the deployment of **Watsonx**-powered self-service robots, kiosk avatars, and omni-channel conversational AI systems that enhance customer engagement across our partner Telecommunication and banking companies.
- Developed custom NLP modules within Watsonx.ai to support multilingual interactions in Arabic's regional dialects (Egyptian and Saudi) with high accuracy—to ensure a seamless customer experience.
- Leveraged **IBM Watsonx** to power event robots that enabling features like automated registration (with ID/QR code scanning and instant photo printing), interactive demonstrations, and real-time feedback collection.

AI Developer Intern, Eviron Adapt

Aug. 2024 - Oct. 2024

- Using Tensorflow and OpenCV to create Siamese Networks that was used in an image recognition model to distinguish between identical trash bales and bales viewed from different angles, automating a previously manual task and significantly reducing company costs in storage and payments by thousands of Egyptian pounds.
- **Designed and implemented a validation model** to assess image quality against stakeholder-defined requirements, ensuring compliance and improving precision in image verification processes.

AI Developer Intern, ESLSCA University

Feb. 2024 - Apr. 2024

- Developed a project, earning ESLSCA University The Times Highest Higher Education Award 2024 in Technological/Digital Innovation at the Arab Summit of Universities, Dubai.
- Used **Langchain** Framework and **OpenAI** Function Calling to build a GPT-powered chatbot that guides prospective students, provides real-time updates, and **automates document processing** and verification.
- **Streamlined admissions** by reducing processing times, enhancing communication, and reallocating staff for personalized support, boosting efficiency.
- Integrated Chroma Vector Database and RAG to provide the chatbot for contextual awareness.
- Worked on **Django backend** and seamlessly connected it with the **React frontend** via **RESTful APIs**, ensuring efficient system integration.

Software Developer Intern, IIG-HEC

Jun. 2023 - Dec. 2023

- Website Link: www.iig.land
- Website developed using **ReactJS**, showcasing the company's projects.
- Real-time blog post system using **Firebase Storage** and **Firestore**.

• Deployed the website on **Vercel** serverless hosting.

XR Developer Intern, GMind

Jul. 2023 - Oct. 2023

- Used C# to implementing player mechanics and complex AI behavior of NPCs and player interactions.
- Gained a clear understanding of **Object-Oriented Programming**
- Refine tasks to help to achieve the vision of the game designer.

Outstanding Achievements

- Published a Journal of Elsevier's Procedia Computer Science. Journal name: Multi-Hop Arabic
 LLM Reasoning in Complex QA. Presented in ACLing 2024, the 6th International Conference on AI in Computational Linguistics in Dubai, UAE. Link to Paper Here
- Winner at the GenAI Hackathon, hosted by Stakpak, for presenting the AI-powered Language Learning App shown under the Projects Section. Link to Post Here
- Worked on project with my university that has been awarded **The Times Higher Education Award 2024** in Technological or Digital Innovation category in the Arab Summit of Universities in Dubai University. Link to Post Here
- My Startup GPTuBE has been named one of the Top 3 finalists in the **GESAwards 2024 Africa** and will represent Egypt and North Africa in the **Global GESAwards**. <u>Link to Post Here</u>

PROJECTS

• Language Learning Application

A full-stack language learning platform integrating AI to personalize vocabulary building and reading comprehension. Features include:

- o **Word Bank system** powered by AI to automatically populate, categorize, and assign 5-level mastery scores based on user progress and study patterns.
- o AI-driven **chatbot** assistant for real-time word extraction, grammar support, and personalized learning recommendations.
- o Immersive Reading Mode with contextual word lookup and real-time comprehension tracking.
- o Dynamic **Story Library** that generates custom stories using words from the user's Word Bank, tailored to their vocabulary level.
- o **Spaced repetition flashcards**, gamified quizzes, and a daily streak system to reinforce learning and boost engagement.

Technologies used: Django REST Framework, Next.js, React, TypeScript, TailwindCSS, Google Gemini, SQLite

• GPTube

Allowed interactive engagement with YouTube videos through a **GPT-powered chatbot** that understood the content of the video. Used **Microsoft Azure** to integrate the GPT model, TTS and STT tools. The tool also enabled the creation of customized experiences based on Video Content:

- o Generating Interactive Mock Tests.
- o Correction and Explanation of User Answers.
- o Generating PowerPoint Presentation.

Technologies used: Microsoft Azure, React.js, Django, Langchain, Chroma Vector Database, OpenAI Function Calling

GitHub: github.com/Gallillio/GPTube

• Real-Time Facial Emotion Classification

Leveraged transfer learning techniques as well as developing my own CNN model from scratch to build a real-time facial emotion classification system.

Technologies used: OpenCV, CNN, MobileNetV2, VGG, ResNet50, Data Augmentation *GitHub:* github.com/Gallillio/RealTime_Facial_Emotion_Classification

• Data Visualizer with Machine Learning Training Using UI

Data Visualizer platform integrating **Supervised Machine Learning** prediction capabilities within a user-friendly interface. Allowing user to:

- o Data Exploration, Cleaning, Transforming, Embedding, and Augmenting.
- o Machine Learning Algorithms for training such as Regression, Classification, Ensemble Methods.
- o Access to model Metrics such as: Accuracy, Precision, Recall, F-1 score, MSE

Technologies used: Python, NumPy/Pandas, scikit-learn, Matplotlib *GitHub*: github.com/Gallillio/Data_Science-Data_Visualizer_Tool

SKILLS

Programming Languages: Python, JavaScript, TypeScript, C#, HTML, CSS

Tools: Microsoft Azure, Watson Cloud, Google Cloud, Git, Django, Tensorflow, Keras, scikit-learn, OpenCV, ReactJS, NextJS, TailwindCSS, PowerBI, Unity

Soft Skills: Agile Manifesto, Kanban Boards, Data Driven Decision Making, Data Analysis, Sales Skills

CERTIFICATIONS

Microsoft Certified: Azure AI Engineer Associate / Link To Certification Issue	d May.	2025
Courses		
AI-102T00-A: Designing and Implementing a Microsoft Azure AI Solution / Microsoft	t Feb.	2025
AI-900T00-A: Microsoft Azure AI Fundamentals / Microsoft	Feb.	2025
AZ-900T00-A: Microsoft Azure Fundamentals / Microsoft	Feb.	2025
Practitioner Watsonx Assistant / IBM	Feb.	2025
Watsonx Orchestrate Intermediate / IBM	Feb.	2025
Linux Adminstration / New Horizons	Jul.	2023
Security + / CompTIA	Apr.	2023
Cloud AWS Practitioner / Amazon	Oct.	2022
Supervised Machine Learning / DeepLearning.AI	Aug.	2022
Network + / CompTIA	Aug.	2022
CompTIA $A+$ / $CompTIA$	Aug.	2022