

Abdallah Mohamed Alkholy

AI Developer

📍 Giza, Egypt 📞 +201020783180 ✉️ abdallyalkhuoly@gmail.com 🔗 linkedin.com/in/abdallah-alkholy-9b9a36181
🐙 github.com/Alkholy53

Work Experience

- **Freelance Software & Hardware Engineer — Self-Employed** Feb 2021–Present
 - Completed 20+ projects involving software and hardware systems
 - Developed perception algorithms integrating sensor data, improving decision-making in automated systems
- **Software Developer Intern — OBYAN — Cairo, Egypt** July 2023–Jan 2024
 - Simulated Advanced Rider Assistance Systems (ARAS) Level 1 on a scooter in Gazebo virtual environment
 - Implemented safety features (Blind Spot Detection, CWS, ACC) using real-time sensor data
- **Textile Engineering Intern — A&M Programming Co. — Alexandria, Egypt** Jul 2023–Aug 2023
 - Optimized textile production data using ML techniques (94% model accuracy)
 - Managed agile processes for 4-member team, improving productivity

Education

Arab Academy for Science, Technology and Maritime Transport Feb 2021–Feb 2025

Bachelor of Artificial Intelligence — Alamein City, Egypt

GPA: 3.6/4.0

Relevant Coursework: Machine Learning, Deep Learning, Data Science, Reinforcement Learning, Cloud Computing, Problem solving, Image Processing, Computer Vision, NLP, Software Engineering

Projects

- **Multimodal LLM Chatbot** [Repo Link]
 - Engineered E2E chatbot (CLIP/BLIP/LangChain) with RAG framework, reducing response latency by 40% via Chroma vector DB
 - Deployed Streamlit app supporting text/image/voice inputs (Ollama LLM) achieving 92% user satisfaction
- **Egy_Speaker_Diarization** [Repo Link]
 - Built Arabic dialect ASR system (NVIDIA NeMo) with 12% WER in noisy environments.
 - Automated data pipelines using Python, reducing processing time by 35% (SentencePiece tokenizer)
- **AI College Chatbot** [Repo Link]
 - Delivered bilingual Flask chatbot (BERT-NLP) with 97% message accuracy, handling 500+ weekly queries
 - Implemented CI/CD pipeline reducing deployment errors by 60%

Achievements

- Achieved **3rd place** in RoboCup @Home Education Competition 2024, Alexandria, Egypt
- Secured **2nd place** in RoboBoat 2023, Alexandria, Egypt, and ranked **15th** globally in RoboNation

Technical Skills

- **Programming:** Python, C++, JavaScript, R **ML Frameworks:** PyTorch, TensorFlow, Hugging Face, LangChain, RAG
- **AI Tools:** OpenCV, scikit-learn, Keras, NVIDIA NeMo, LLMops **Data:** Pandas, NumPy, Plotly, NLP
- **DevOps:** Docker, Kubernetes, Git, CI/CD **Cloud:** AWS, GCP, Kubeflow
- **Robotics:** ROS/ROS2, Gazebo, SLAM, Arduino, IoT, Computer Vision
- **Web:** Flask, FastAPI, Node.js **Tools:** Linux, VS Code, Jupyter

Extracurricular Activities

- **Student Union President — AAST AI College** 2023–2024
Led student initiatives and academic activities for 300+ members
- **Founder & VP — Alamein Innovation Club** 2022–Present
Organized 15+ tech workshops and innovation challenges