

Mohamed Sajed Gharsalli

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Professional Summary

AI Engineer specializing in building intelligent systems that solve real-world problems. Experienced in machine learning, deep learning, and large language models, with hands-on expertise in computer vision. Proven ability to transform complex data into scalable, practical products, delivering measurable impact in cross-functional teams. Quickly adopt emerging AI trends to deliver solutions that are both scalable and impactful.

Experience

AI Engineer, T-SCOP	11/2024 – 06/2025 (Full-time)
– Developed an end-to-end AI agent for smartphone repair, combining computer vision and vector similarity search to increase device model identification accuracy from 40% to 90%.	
– Integrated a RAG-powered LLM for intelligent issue triage, reducing manual effort and accelerating repair workflows.	
AI Engineer, Skwere ADS	06/2024 – 08/2024 (Summer Internship)
– Built a real-time speech-to-text system using OpenAI Whisper, streamlining daily operational communication.	
Software Engineer, RATNAFY	06/2023 – 08/2023 (Summer Internship)
– Designed and implemented a mobile version of a web platform for Tunisian student freelancers.	

Education

National Diploma in ICT Engineering	2022 – 2025 (GPA: 3.3/4.0)
– Higher School of Communication of Tunis (SUP'COM), Ariana, Tunisia	
– Specializations: Computer Networks, Software Engineering, AI & Machine Learning	
Preparatory Studies for National Engineering Exam (Mathematics & Physics)	2020 – 2022 (Ranked 121/1200)
– Tunis Preparatory Engineering Institute (IPEIT), Tunis, Tunisia	

Projects and Outside Experience

RAG-Based AI Tutor – Retrieval-Augmented Learning API (GitHub Repo)	2025
– Designed and deployed a RAG-powered AI tutor capable of ingesting diverse academic documents, leveraging an advanced document parsing and embedding pipeline to perform semantic retrieval and deliver context aware answers to student queries.	
– Developed API endpoints to integrate the tutor into platforms, allowing personalized educational assistance.	
Keywords: Retrieval-Augmented Generation, NLP, Python, Semantic Search, Vector Database, API Development	
Billing Manager AI Agent – Paper-Receipt to Structured-Data Pipeline (GitHub Repo)	2025
– Built an end-to-end AI agent to process paper receipts and invoices, performing OCR, semantic understanding, and automatic extraction of vendor details, line-items, quantities, and totals into structured JSON.	
– Implemented intelligent parsing and error correction to handle diverse and inconsistent receipt layouts, significantly reducing manual bookkeeping effort while ensuring high data accuracy.	
Keywords: AI Agent, OCR, LLM, Layout Parsing, Automation	
Math Solver AI Tutor – Step-by-Step Math Problem Solver (GitHub Repo)	2025
– Developed an AI tutoring system capable of solving algebra and calculus problems while providing detailed step-by-step explanations for educational use.	
– Improved user engagement by ensuring precise reasoning and accuracy across a wide variety of mathematical problem types.	
Keywords: AI Agent, LLM, E-learning, Langchain	
Real-Time Speech Recognition System – Live Transcription with Whisper (GitHub Repo)	2024
– Developed a real-time speech-to-text system capable of capturing live microphone input and providing immediate transcription for streaming or voice-driven applications.	
– Designed multi-language support to handle diverse speech patterns and vocabulary reliably.	
Keywords: Speech-to-Text, Real-Time Transcription, Streaming, Whisper	

Skills

Programming Languages: Python, C/C++, JavaScript

Core CS: Data Structures, Algorithms, Mathematics, Probability & Inference, Networks, Big Data

AI/ML: Machine Learning, Deep Learning, Computer Vision, LLMs

Cloud & DevOps Tools: AWS, Azure, Docker, Git/GitHub

Frontend Development: React, React Native, Streamlit

Backend Development: NodeJs, FastAPI, Flask, API Integration

Certifications and Achievements

TOEIC: Score 940/990 ([Certificate](#))

DeepLearning.AI Certified: Machine Learning, Neural Networks and Deep Learning