MAJD AYOUB

Computer Engineering Graduate | AI Systems | Software Engineering | Cybersecurity | Cloud | Open Source
Relocating to the Bay Area CA | U.S. Permanent Resident - No sponsorship required | majdayoub102@gmail.com
Portfolio | LinkedIn | GitHub | Hugging Face

PROFESSIONAL SUMMARY

Computer Engineering graduate with project-based experience across software engineering, backend APIs, AI/NLP systems, cybersecurity, database systems, cloud fundamentals, and computer engineering foundations. Built TruthLens, a bilingual AI-assisted credibility assessment platform using multi-model consensus, RAG, FastAPI, Redis, Celery, Docker, NLP models, and privacy-focused PII redaction. Contributed a merged Python PR to OpenSSF cve-bin-tool focused on type safety, logging consistency, and tests. Open to software engineering, backend, full-stack, AI systems, cybersecurity, cloud, and embedded/systems-adjacent engineering opportunities.

TARGET ROLES

Software Engineer | Backend Engineer | Full-Stack Developer | AI Systems Engineer | AI/ML Engineer | Cybersecurity Analyst | Cloud/DevOps Associate | Computer Engineering / Embedded & Systems Roles

CORE TECHNICAL SKILLS

Programming: Python, JavaScript, TypeScript, SQL, HTML5, CSS3, C++, Java

Software & Backend: FastAPI, Flask, Jinja2, REST APIs, Pydantic, HTTPX, Uvicorn, Gunicorn, SQL CRUD, mypy, logging, responsive web development

AI/ML/NLP: Scikit-learn, TF-IDF, Logistic Regression, BERT, RoBERTa, CAMeL-BERT, RAG, LLM orchestration, NER, OCR/Tesseract, Hugging Face, Gradio

Cloud, Data & DevOps: Docker, Docker Compose, Linux, Git/GitHub, Redis, Celery, Firebase/Firestore, ChromaDB, SQL, RDBMS, NoSQL fundamentals, Kubernetes fundamentals

Cybersecurity: Phishing analysis, financial scam detection, web application security testing, Google Hacking, VirusTotal API, threat/vulnerability awareness, PII redaction

Computer Engineering Foundations: Computer architecture, operating systems, network protocols, cloud computing, Arduino, mikroC for PIC, embedded systems exposure, hardware-aware software development, technical troubleshooting

PROFESSIONAL EXPERIENCE

Full Stack Web Development Intern | Jordan Computer Society | Amman, Jordan | Oct 2025 - Jan 2026

- Completed a structured 280-hour full-stack web development internship with 140+ practical tasks across front-end interfaces, server-side prototypes, database operations, and debugging workflows.
- Designed responsive, mobile-first layouts using HTML5, CSS3, and Bootstrap; built Flask/Jinja2 prototypes for routing, request handling, forms, and templated views.
- Implemented relational database structures and SQL CRUD operations; applied JavaScript DOM manipulation and Chrome DevTools debugging to troubleshoot layouts and runtime errors.

SELECTED ENGINEERING PROJECTS

TruthLens - AI-Assisted Credibility Assessment Platform | BAU Graduation Project | Defended Jan 2026 | Technical Report on Zenodo

- Architected a bilingual Arabic/English misinformation analysis Decision Support System using multi-model consensus, RAG, source credibility signals, and explainable AI workflows.
- Integrated Qwen 3 8B, Phi-3 Mini, a Logistic Regression clickbait model, CAMeL-BERT, RoBERTa, SpaCy NER, Tesseract OCR, and FastText language identification.
- Built backend and infrastructure components with Python, FastAPI, Redis, Celery, Docker/CUDA configuration, Docker Compose, ChromaDB-backed RAG provenance, VirusTotal URL screening, and automated PII redaction for emails and phone numbers.

Open Source Contribution - OpenSSF cve-bin-tool | Merged PR #5724 | May 2026

Contributed a merged Python pull request resolving a mypy LOGGER typing issue by adding explicit logging.Logger typing and restoring centralized logger usage.

Updated related output engine and test code to align with the project's shared logging approach in an established open-source security tool.

PhishGuard Pro - Hybrid AI Financial Scam & Phishing Detector | GitHub Project

- Built an AI/security portfolio tool for phishing emails, SMS scams, smishing, and financial fraud analysis using sequence classification and LLM/RAG explainability.
- Produced user-facing security explanations and recommended defensive actions for suspicious messages and URLs.

Machine Learning NLP Deployments | Hugging Face / Gradio

- Clickbait Detector: Built a Scikit-learn TF-IDF + Logistic Regression classifier, achieved 96.39% test accuracy, packaged with joblib, and deployed to Hugging Face Hub.
- Fake News Detector: Built an article-level news veracity classifier using Scikit-learn, TF-IDF, Logistic Regression, Skops, Gradio, and Hugging Face Spaces.

Model Context Protocol (MCP) Interactive Developer Notebook | Vercel + Notion + GitHub

- Created a developer reference and playground UI for MCP transport patterns, protocol behavior, security boundaries, and tool-integration simulators using JavaScript and responsive CSS.

BayForge AI - Educational Multi-Agent RAG Prototype | GitHub Project

- Built a Next.js 16, TypeScript, and Tailwind CSS educational PoC exploring multi-agent RAG for California ADU zoning analysis with 12+ external APIs and multiple LLM interfaces.
- Archived as an educational reference due to data-integrity, legal-risk, and professional ethics considerations; not intended for legal or regulatory compliance.

EDUCATION

B.S. Electrical Engineering / Computer Engineering | Al-Balqa Applied University (BAU) | Dec 2020 - Mar 2026

Activities: IEEE | Relevant Coursework: Artificial Intelligence & Machine Learning, Data Structures & Algorithms, Database Systems, Operating Systems, Network Protocols, Fundamentals of Cybersecurity, Cloud Computing, Object-Oriented Programming, Computer Architecture

Database Management Systems MicroMasters Program | University of Maryland Baltimore County (UMBC) | May 2026 - Present

Coursework: Relational Database Management Systems, Relational Database Design, NoSQL Databases, SQL, data modeling, and database design.

PUBLICATION

An AI-Assisted Credibility Assessment Platform | Zenodo Technical Report

- Technical report covering TruthLens architecture, LLM-based credibility assessment, explainable AI, and scalable misinformation analysis.
  DOI: 10.5281/zenodo.19591334

SELECTED CREDENTIALS & PROOF LINKS

Full credential registry and proof links: https://majdayoub.com/code4.html

OpenSSF cve-bin-tool merged PR #5724 - OpenSSF, May 2026; Python typing, mypy, logging consistency, test maintenance
Database Management Systems MicroMasters Program - UMBC, May 2026 - Present; RDBMS, relational design, NoSQL, SQL
GitHub Foundations - DataCamp, Apr 2026; DevSecOps, IAM, OAuth, policy management, supply chain security
Project Initiation: Starting a Successful Project - Google / Coursera, May 2026
Cloud and Kubernetes - BAU IEEE Student Branch, Mar 2026; Kubernetes architecture, deployments, scaling, networking, rolling updates, observability
Career Essentials in Cybersecurity - Microsoft / LinkedIn, Jul 2025; cybersecurity, threat and vulnerability management, information security awareness
Web Application Security Testing with Google Hacking - EC-Council, Apr 2024
Deep Web and Cybersecurity - EC-Council, Apr 2024
Linux 101 - TCM Security, May 2023
Programming with Python 3.X - Simplilearn, Oct 2025
Electronic Arts Software Engineering Job Simulation - Forage, Jan 2026
IEEE Member - IEEE, ID #98114577

COMMUNITY & LANGUAGES

Community: IEEE BAU Computer Society Volunteer, Jan 2023 - Jan 2026 - Science and Technology | IEEE Computer Society Member |
Languages: Arabic - Native; English - Professional Working Proficiency