Khalid A. Khader

Al Engineering & Software Engineering consultant

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Software Engineer | Data Scientist | Data Engineer

Palestinian Authority - West Bank

SUMMARY:

I'm Khalid Khader, a Certified <u>Azure Al Engineer</u> trying to be an expert in Generative AI, LLMs, Machine Learning, Deep Learning, Data Engineering, and Software Development. Currently consulting in medical AI at Bitlab/Instclinic Canada. Former AI Production Team Lead at MENA DEVS, specializing in NLP, computer vision, and AI-driven solutions. Proven experience in healthcare AI, HR analytics, and cybersecurity. Passionate about AI consulting, enterprise AI deployment, and integrating AI into software development. Speaker and trainer in AI, ML, and deep learning.

PROFESSIONAL SKILLS:

Artificial Intelligence & Machine Learning:

AI & ML Frameworks:

TensorFlow, Keras, PyTorch, OpenCV, YOLO, Hugging Face, DeepSeek, LangChain, SHAP, LIME, Whisper and speech to text.

Data Science & Analytics:

NumPy, Pandas, Matplotlib, Seaborn, SciPy, sci-kit-learn, XGBoost, LightGBM, Time Series Analysis.

Natural Language Processing (NLP):

NLTK, spaCy, OpenAl Studio, Microsoft Azure Al, Transformers, LLM Development & Tuning, Prompt Engineering, RAG Graph.

Generative AI:

GANs, Autoencoders, LLMs, Language Studio, Azure Al Vision Studio, Midjourney, DALLE, Stable diffusion.

Software & Web Development:

Programming Languages:

Python, C++, C, C#, Java, JavaScript, SQL, PL/SQL, Assembly.

Flask, Django, ASP.NET Core, Express.js, Node.js, Java Spring Boot, Oracle APEX PL/SQL, Java Mobile Development.

Front-End:

React.js, HTML, CSS, JavaScript, AJAX, XML, Regex, Basic Angular.

Data Engineering & Cloud Technologies:

Big Data & ETL:

PySpark, Databricks, Dask, Apache Airflow, Azure Data Factory, Automated ML.

Databases:

Oracle SQL, MySQL, PostgreSQL, MSSQL, MongoDB, SQLite, Neo4J knowledge database, Firebase.

Business Intelligence & Data Visualization:

Tableau, Power BI, Knime, Oracle APEX, Streamlit, Plotly.

Other Technical Expertise:

DevOps & Deployment:

Docker, Linux, Git, GitHub, Bitbucket, JIRA RunPod.

Networking & API Testing:

Postman, REST APIs, Google Colab.

Embedded Systems & Hardware:

Multisim, VHDL, Verilog, SystemVerilog.

Soft Skills:

- Strong leadership & teamwork.
- Problem-solving & critical thinking.
- Effective communication & technical writing.
- Cross-functional collaboration.

WORK EXPERIENCE:

AI Engineering & Software Engineering consultant

Full-time AI & Software Engineering consultant - Remotely - Mar 2025 - Present Bitlab - Canada

Start working as an AI Engineer on AI medical systems using Graph RAG, LLM's Azure Speech services, Tuning Whsiper v3 model, Speech to text, Text to speech services, Neo4j, FastApi, Nest JS, and Next JS with an international team.

Al Production Team Lead

Full-time -short-term contract - Dec 2024 - May 2025 - MENA DEVS - Jordan -contract

Start working to lead a team of 25 AI Engineers to train LLM models for MENA DEVS clients. And work on developing AI platforms by integrating LLM's in Django, Flask and React JS.

<u>Data Science and Machine Learning Engineer</u> - Full Stack developer

Full-time - Hybrid with AXSOS AG / AXSOS Academy GMBH - June 2023 - Dec 2024 - Germany

O I was responsible for developing the initial data science and machine learning program at AXSOS Academy in collaboration with Coding Dojo – USA (Part of Colorado University, With extensive expertise in computer vision, deep learning, natural language processing (NLP), and databases, I utilized multiple frameworks and libraries including NumPy, Pandas, Matplotlib, Seaborn, Folium, sci-kit-learn, XGBoost, LightGBM, Keras, TensorFlow, SHAP, LIME, Statsmodels, Tableau, CNN, RNN, PyTorch, and time series analysis. My work also involved classifying brain tumors using OpenCV and Tensorflow with Keras and PyTorch and engaging in advanced machine learning using deep learning artificial neural networks (ANN) like CNN, RNN, and possessing fundamental knowledge in generative adversarial networks (GAN) and some LLM. Furthermore, I currently serve as a data scientist in the digitalization department at AXSOS AG, specializing in Microsoft Azure Al, certified Azure Al Engineer.

- I worked on managing the process of creating the Data science and ML curriculum for AXSOS Academy, I created the curriculum for the Copilot and AI course, worked on creating the Data Engineering course, and worked on creating the curriculum for the data structure and algorithms
- Worked as a project manager to give some visions and ideas to our clients to get an Al project.
- O Worked in Azure Al services to deliver some services related to prompt engineering and Al.
- Full-time Hybrid with AXSOS AG / AXSOS Academy GMBH Nov 2022 July 2023 Germany

I have excelled in code review and project management and have been certified by Coding Dojo in MERN, Python (Django and Flask), and Java Spring Boot stacks. I contributed to the development of the ALGOS LABS project for AXSOS Academy, working with a team of specialists in React TS, Java Spring, MongoDB, and Postgres database. Additionally, I have been working on AI Sessions with some basic AI applications.

Consultation services

Part-time <u>Data Scientist</u> - Remotely with KSA Clients - Dec 2024 - Feb 2025 - KSA

Start working as a data scientist for HR systems to create AI features for the HR systems. Created a Machine Learning model for the HR system to predict employee salary using textual data about him with the dashboard.

 Part-time <u>Data Processing and Machine Learning Consultant</u>- Remotely for a team of Professors from Hebrew University and Al-Quds University - Aug 2024 - Dec 2024 - Israel-Palestine

Consult a DNA professor to process DNA data to predict future cancers.

- Part-time <u>Al Consultant</u> Remotely with Saudi clients Feb 2024 May 2024 KSA
 Deliver some Al services and tools for some projects in different domains, using Python and some Bl tools such as Knime.
 - Full-time <u>Team Lead for Smart Advising System</u> On Site Jenin Sep 2021 June 2022 ARAB AMERICAN UNIVERSITY Palestine Creating a system using APEX Oracle and implementing artificial intelligence techniques. This system aims to assist our computer science

Creating a system using APEX Oracle and implementing artificial intelligence techniques. This system aims to assist our computer science engineering students of all educational levels by displaying their course plans and detailed course descriptions. visit it

- Part-time <u>Software developer</u> Hybrid with Birzeit Legal Clinic Mar 2023 Oct 2023 Palestine
 Contribute as a volunteer to assist in creating a legal clinic system for Birzeit University.
- Part-time <u>Professional Mentor</u> Remotely with TAP Sep 2023 June 2024 Netherlands
 Deliver some AI sessions and mentor sessions for their community.

Internship - EXALT Technologies

- Full-time Front-End Development Intern On-Site Ramallah June 2022 Sep 2022 EXALT Technologies Palestine
 I have learned HTML, CSS, and JavaScript, as well as Firebase database, Git, GitHub, AJAX, jQuery, regex for validation, and React JS. I have created many applications using JSX, React State, React Events, Reducers, JSON web tokens, Hooks, React Styling, Fragments, Portals, HTTP Requests, Connecting to Databases, React Router, Single-Page Applications (SPA), Deploying React Apps, Authentication, React Forms, Context API, Rest API, and some other APIs.
- Full-time <u>Design and Verification Engineer Intern</u> On-Site Ramallah May 2022 June 2022 EXALT Technologies Palestine Learned some basic concepts about Verilog programming language and System Verilog.

Projects:

- Created a Machine Learning model for the HR system to predict employee salary using textual data about him with the dashboard.
- Worked on building an HR system that extracted data from CVs and used LLM to classify if the people were fit for the job or not.
- Worked as a consultant for an advertising app using AI by scraping users' data from social media, clustering the users then sending them automatic ads.
- Worked as a consultant for creating a healthcare platform for user personalization data.
- Worked as a consultant for cancer detection data processing using DNA data.
- Worked on creating data pipeline for healthcare data for cancer detection app.
- Worked on IOT attacks to create. Machine Learning model to check the attacks for the IOT devices which I achieved 99% of recall for this model.
- Worked on creating software Maintainability Index for software codes, to check the maintainability for the codes, I did that with my team by creating a
 dashboard for the code maintainability index.
- worked on developing a Deep Learning system that detects brain tumors using OpenCV and TensorFlow with Keras. I created a CNN model with 98% recall and accuracy. Additionally, I developed new models to classify Alzheimer's using X-ray scans with 94% accuracy and to classify COVID-19 X-rays with 89% accuracy. These models were deployed using a Flask web app that connected to a database to save log information and model tests. You can visit the web app to see it in action, here.
- Worked on PIN side-channel attacks using machine learning involving creating multiple ML and DL models to target the PIN number. I discovered that the most effective model was Logistic Regression, with an accuracy of 85%.
- I have implemented OS protection using machine learning (ML) and deep learning (DL) techniques. I applied feature engineering and principal component analysis (PCA) to build a machine learning model for analyzing Microsoft Azure DLL file data on Windows 11, aiming to detect attacks. Our model achieved an accuracy of 78% and a recall rate of 99% on the testing data. Additionally, I used logistic regression to detect malware in Android data, achieving a testing accuracy of 98%.
- Cyber Attacks classifications using ML and DL with an accuracy of 93% for DL.
- I contributed to the development of the ALGO LABS project for AXSOS Academy with a team of specialists in React TS, JAVA SPRING, Mongo, and Postgres
 databases
- I developed a system using APEX ORACLE that incorporates Artificial Intelligence techniques. The system is designed to assist our computer science engineering
 (CSE) students at all educational levels. It displays the courses in the student's curriculum along with detailed descriptions. You can access it here. here.
- I worked as a consultant partially while developing a Legal Clinic project for Birzeit University. more
- Creating a simple CRM project for Palestinian Civil Defense Tulkarm you can visit it here.

EDUCATION:

Master's Degree in Computer Engineering - Nov 2022 - July 2025

Birzeit UNIVERSITY

My main focus was on Machine Learning, Deep Learning, Computer vision, Image processing, and some cyber security, Networking, and Hardware systems, my thesis will be about Brain tumor classification using Image Processing, Computer vision, CNN, and more Deep Learning techniques.

Bachelor's Degree in Computer Systems Engineering - Sep 2018 - July 2022

ARAB AMERICAN

UNIVERSITY

In 4 years instead of 5 with very good, my main focus was on Databases, web development, Al, Hardware systems, and Verilog.

Deep learning using TensorFlow, and PyTorch-March 2024

OpenCV

University - USA

Many courses in Data Science, Machine Learning, and Full Stack during my work at AXSOS AG.

Image processing and computer vision using Python - April 2024

OpenCV University - USA

Many courses in Data Science, Machine Learning, and Full Stack during my work at AXSOS AG.

OpenCV University - USA

Generative AI track - March 2025

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Focusing on advanced modern generative AI models for Art(Videos, images, and textual data) and tuning.

Online courses - Nov 2022 - Oct 2024

<u>Coding dojo</u> - Part of <u>Colorado University USA</u>

Many courses in Data Science, Machine Learning, and Full Stack during my work at AXSOS AG.

Data Engineering Track - Oct 2024 - Dec 2024

Data Camp - USA

Certified Data Engineer using Python, by taking many courses in special topics in Data Engineering and data processing.

Microsoft Azure Al Engineer - May 2024 - Oct 2024

Microsoft

Certified Azure Al Engineer by Microsoft during my work in AXSOS AG.

CERTIFICATIONS & COURSES:

I finished learning from Coding Dojo for MERN Stack (Mongo Database, Express JS, React JS, Node JS) with a red belt, Java Spring boot, Python Django and Flask, Data Science and Machine Learning, and start on Image processing and Computer Vision, and generative AI - OpenCV University, and Deep Learning using TensorFlow - OpenCV University after that start learning from Microsoft for Certified Azure AI Engineer, then Building Dashboards with Dash and Plotly, ETL and ELT in Python, Cleaning Data in PostgreSQL Databases, Understanding Data Engineering, Introduction to Data Engineering, Databricks Concepts, Databricks Fundamentals, Cleaning Data in Python, Streamlined Data Ingestion with pandas, Software Engineering Principles in Python, Introduction to Apache Airflow in Python, Writing Efficient Python Code, Understanding Cloud Computing, Introduction to Python for Developers, Intermediate Importing Data in Python from DataCamp.

HONORS & AWARDS

In My Bachelor Level I got GPA more than 90% (3.67) 4 times in Bachelor of Computer Systems Engineering, this semester in Master my GPA is 4/4.

Publications and research:

Im working to publish my research about brain tumors detection using CNN which will be my master thesis, I have four papers written in IEEE formats, the <u>first one</u> about Brain Tumors classifications, the <u>second</u> about Cyber attacks classifications, the third one for PIN recognition to detect side-channel attacks using DL, and the last one OS protection using ML.

Languages:

Arabic - Native

English - Fluent

Personal Information:

- Passport: Palestinian Passport active from 2023 to 2027.
- Active High Tech Permission.
- Marital status: single.
- Date of birth: 10th May of 2000 Ramallah

- Place of residence : Palestinian Authority West Bank -Tulkarm
- Palestinian driver's license: Active since 2018.
- Nationality: Palestinian

Contact and Links:

- Visit Khalid Website.
- Visit Khalid Leet-Code Profile
- Visit Khalid GitHub Profile.
- <u>Visit Khalid LinkedIn Profile</u>.

- Visit Khalid Facebook Profile.
- Visit Khalid Al Medical App.
- Book a meeting with Khalid.
- WhatsApp: +970568807701.

References:

- Mr. Nasri Ladaa AXSOS ACADEMY, Khalid supervisor in AXSOS AG, ladaanasri@gmail.com.
- Mr. Hussien Soboh AXSOS ACADEMY, Birzeit University <u>Hussien.Soboh@gmail.com</u>
- Mr. Saad Hroub NVIDIA, Khalid former supervisor in AXSOS AG, saad.hroub@gmail.com.

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 Dr. Rami Khalil - Dean of Faculty of Registration and Administration - Arab American University.