# Ahmed Ibrahim Almalki

# **SUMMARY**

Al Engineer | Machine Learning Specialist | Solution Architect

Computer Science graduate from Umm Al-Qura University with expertise in Al, Machine Learning, and Computer Vision. Experienced in designing and deploying Al-driven solutions for healthcare, automation, and predictive analytics. Skilled in Python, TensorFlow, PyTorch, NLP, and cloud-based Al deployment. Passionate about developing scalable, real-world Al applications to drive innovation and efficiency.

#### PROFESSIONAL EXPERIENCE -

# Al Engineer - GCAD (Freelance) | March 2025 - Present

# Remote

- o Developed Al-driven automation systems to enhance business decision-making.
- Designed **predictive analytics and NLP models** to improve user interactions.
- Conducted R&D on advanced ML architectures, improving efficiency and accuracy.

# Software Engineering Intern - Maternity & Children's Hospital | June 2024 - Aug 2024

# Makkah, Saudi Arabia

- Developed AI-based medical diagnostic tools, improving healthcare outcomes.
- Trained ResNet deep learning models for chest X-ray classification (pneumonia detection).
- o Integrated Large Language Models (LLMs) to automate medical report generation.

#### **EDUCATION -**

# **Umm Al-Qura University**

**Bachelor's in Computer Science** (Feb 2025)

Makkah, Saudi Arabia

- *Graduation Project:* Al-Mujamma A unified platform connecting major local markets for seamless household online shopping.
  - Achieved an A+ Grade.
  - Led system design, backend development (Laravel, PHP), and RESTful API integration.
  - Developed core features, including Address System, Payment System including Transaction & Wallet, and Notification System.

# PROFESSIONAL SKILLS AND INTERESTS -

## **Technical Skills:**

- Programming & Al Development: Python, OpenCV, TensorFlow, PyTorch, SQL, NoSQL
- Machine Learning & AI: Supervised & Unsupervised Learning, Image Classification, Large Language Models (LLMs), NLP
- Data Science & Analytics: Data Preprocessing, Feature Engineering, Model Evaluation, Statistical Analysis
- Data Visualization: Matplotlib, Seaborn, Tableau
- Big Data & Databases: MySQL, Pandas, NumPy, Hadoop, Spark
- Software Engineering & Deployment: API Integration, Backend Development (Laravel, Flask, PHP), Model Deployment, Linux, Google Colab, Jupyter Notebooks
- UI/UX & Agile Project Management: User-Centric Design,
  Agile Methodologies, Strategic Planning, Version Control (Git)
- Cloud & Deployment: TensorFlow, Google Colab, Jupyter Notebooks
- UI/UX Design: User-Centric Design

## **Soft Skills:**

- Leadership & Team Collaboration
- · Problem-Solving & Analytical Thinking
- Attention to Detail & Precision
- Excellent Communication & Technical Writing
- Time Management & Prioritization
- Critical Thinking & Innovation
- · Adaptability & Continuous Learning
- Collaboration in Multidisciplinary Teams
- Advance English Language

# PROFFICINAL PROJECT -

# [Al-Mujamma – Graduation Project] (LINK)

A unified online shopping platform connecting local markets for seamless household shopping.

- Designed and developed backend architecture (Laravel, PHP) and API integration
- Implemented key systems: Address System, Payment System including Transactions and Wallet Management,
  Notification System
- Achieved A+ Grade for innovation in e-commerce solutions

# [Medical Chest X-Ray Analysis for Pneumonia Detection] (LINK)

An **Al-powered diagnostic tool** that classifies chest **X-ray images** as **NORMAL** or **PNEUMONIA** and generates automated reports.

- Developed and trained a ResNet-based deep learning model for medical image classification
- Integrated Large Language Models (LLMs) to generate detailed diagnostic reports
- · Improved diagnostic accuracy and decision-making support for healthcare professionals

# [Intelligent Customer Support Chatbot (Fine-Tuned LLM)] (LINK)

A **BERT-based chatbot** optimized for handling customer support queries, including order **tracking and product recommendations.** 

- Trained on 27,000+ interactions, leveraging NLP and deep learning
- Optimized with Weights & Biases (Wandb) for tracking & hyperparameter tuning
- Improved response accuracy and customer engagement using fine-tuned transformer models

# **CERTIFICATES =**

- IELTS (English Proficiency) IDP | Mar 2023
- PHP and MySQL FlexCourses | Feb 2025
- Linux Basics FlexCourses | Feb 2025
- Web Development with Laravel FlexCourses | Feb 2025
- Version Control Using Git FlexCourses | Feb 2025
- Java Programming FlexCourses | Dec 2024
- Self-learning Art Course FlexCourses | Dec 2021

# LANGUAGES-

• English: Full Professional Proficiency

• Arabic: Native

# Additional Interests & Research

- Al research & deep learning applications
- Scalable AI architectures & cloud-based AI solutions
- Innovations in Generative AI and MLOps