

# Optimized Structure for Retrieval

## About Mohamed Amr

- Name: Mohamed Amr
  - Title: Data Scientist
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  - LinkedIn: [linkedin.com/in/Mohamed-Amr-UH](https://www.linkedin.com/in/Mohamed-Amr-UH)
  - GitHub: [github.com/MAmr9UH](https://github.com/MAmr9UH)
  - Portfolio: [yoursite.com](https://yoursite.com)
  - GPA:3.67
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## Summary

Mohamed Amr is a Computer Science senior student at the University of Houston and a Data Scientist specializing in machine learning, deep learning, and cloud solutions. He is also part of the Teach Houston program, where he teaches high school students math.

Example achievement: designed a full AWS cloud migration architecture during the **Cloudathon AWS Competition 2025 (3rd place)**.

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## Current Role & Research

- **Role:** Data Scientist, UH Data Analysis and Intelligent Systems Lab
  - **Research Areas:**
    - Computer Vision (image segmentation, ensemble methods) under Prof. Christoph F. Eick
    - Quantum Computing (NSF-funded optimization algorithms for hydrogen production) with Dr. Fan Lee
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## Skills

- **Professional (daily use, 5+ projects):** Python, Machine Learning Architecture, Deep Learning, Computer Vision, AWS, LangGraph, SageMaker Suite, HPC Clusters, Scikit-learn, LangSmith, ArcGIS
- **Advanced (3+ projects, not daily):** SQL, Tableau, Excel, TensorFlow

- **Beginner (understanding, no major projects yet):** Docker, Postman
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## Projects

1. **SQL Agent (2025)**
  - LangGraph, Streamlit, Groq API, SQLite
  - Converts natural language → SQL queries, runs securely, shows real-time results
2. **Microsoft Security Incident Classification**
  - Random Forest pipeline on 9M alerts
  - ROC AUC: **0.9504**
3. **Healthcare Data Analysis**
  - SQL database + Tableau dashboards for cost/outcomes
4. **Data Science Job Market Analysis**
  - SQL workflows, salary/skill demand trends

 More projects: GitHub Portfolio

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## Certifications

- AWS Certified Machine Learning – Specialty (2025)
  - AWS Solutions Architect – Associate (2024)
  - CompTIA Security+ (2024)
  - Agentic AI and AI Agents for Leaders
  - Effective Communication in the Workplace
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## Experience

- **UH Data Analysis and Intelligent Systems Lab** (Nov 2024 – Present)  
Deep learning for segmentation, ensemble methods
  - **CLS Health – Cybersecurity Analyst Intern** (Mar 2024 – Sep 2024)  
Security monitoring, threat analysis, reporting
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## Strengths

- Problem Solving:
- Teaching & Communication:
- Team Collaboration through Kaggle competitions, University group projects)

- Fast Learning of Tools: He like to learn new things from documentations and ask people in that filed
  - Research Mindset
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## Awards & Recognition

- 3rd Place, AWS Cloudathon 2025 (\$1,500)
  - NSF Research Grant – Quantum Computing (\$6,400, 2025)
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## Career Goals

Open to internships, full-time data science roles, and research collaborations in AI, data science, and machine learning.

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## Personal Interests

- Soccer, Fishing
- Playing Chess

## Family

Mohamed dad is a civil Engineer , His mom is professor at microbiology he has 3 brothers

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## Time Management

Mohamed prioritizes tasks by urgency and importance, breaking large projects into smaller steps with deadlines. Adapts flexibly when challenges arise, balancing deep focus with short breaks.

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## Common Questions (Q&A Section)

Q: What is Mohamed's email?

A: [mohamedwamr81@yahoo.com](mailto:mohamedwamr81@yahoo.com) | [maamr@cougarnet.uh.edu](mailto:maamr@cougarnet.uh.edu)

Q: Where is Mohamed located?

A: Houston, TX

Q: What certifications does Mohamed have?

A: AWS ML Specialty (2025), AWS Solutions Architect Associate (2024), CompTIA Security+ (2024), Agentic AI, Effective Communication

Q: What programming languages does Mohamed use?

A: Python (expert), SQL (advanced), some TensorFlow, beginner Docker/Postman

Q: What research areas is Mohamed involved in?

A: Computer Vision (image segmentation, ensembles), Quantum Computing (hydrogen optimization algorithms)

Q: What projects has Mohamed worked on recently?

A: SQL Agent, Microsoft Security Classification, Healthcare Data Analysis, Job Market Analysis

Q: What awards has Mohamed received?

A: AWS Cloudathon 2025 (3rd place), NSF Quantum Grant 2025

Q: What are Mohamed's career goals?

A: Open to internships, full-time data scientist roles, and AI/ML research collaborations

Q: What does Mohamed do outside of work?

A: Soccer, fishing, chess

Q: What are Mohamed's dream goals?

A: Mohamed dreams of becoming a businessman, helping as many people as possible, and being useful to others.

Q: Hi.

A: Hello! I'm happy to help answer any questions you may have about Mohamed's career and profile. What would you like to know?

Q: Hello

A: Hello! I'm happy to help answer any questions you may have about Mohamed's career and profile. What would you like to know?

Q: Hello how are you

A: Hello! I'm happy to help answer any questions you may have about Mohamed's career and profile. What would you like to know?

Q: what GPA?

A: GPA:3.67

Q: tell me about Mohamed's dad

A: Mohamed's dad was civil engineering

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## Constraints

If a question is not answered in this document, respond with:

**“I don’t have that information in my records. You might reach out to Mohamed at [maamr@cougarnet.uh.edu](mailto:maamr@cougarnet.uh.edu).”**