Abdullatif Elmuaqqat

US-Citizen | 240-729-2875 | Elmuaqqat.info@gmail.com | linkedin.com/in/abdullatif-elmuaqqat/ Personal Website

Education

University of Maryland, College Park, MD **Expected Graduation: May/2026**

Bachelor of Science in Computer Science, Minor in Data Science & Technology Entrepreneurship | GPA: 3.794

Relevant Courses: Discrete Structures; Linear Algebra; Computer Systems; Applications of Statistics and Probability; Algorithms; Advanced Data Structures; Software Engineering; Intro to AI; Intro to ML

Skills & Certificates

Programming Languages: Python, Java, C/C++, SQL, HTML/CSS/JS, RStudio
ML & Web: Pandas, NumPy, Matplotlib, Plotly, Feature Engineering, Flask, React, REST APIs, Webhook
Cloud & DevOps: AWS, Google Cloud Platform (Cloud Functions, Cloud Build, Pub/Sub), Docker, Git, ADK

Work Experience

Teaching Assistant| University of Maryland, UMD | (10+ hours/week) **Oct/2025 – Present**

- Supports instruction for a Python for Data Science course by assisting students with Python programming, data analysis, and data visualization during labs and office hours.
- Guides students through data cleaning, exploratory data analysis (EDA), and debugging Python code.
- Grades assignments and projects and provide clear, constructive feedback to reinforce data science and programming fundamentals.

Data Science Intern | Hughes Network Systems, MD | (20+ hours/week) **Jun/2025 – Dec/2025**

- Developed a pipeline to automatically diagnose unmonitored network devices and generate daily diagnostic reports designed using SQL and Python via GCP, improving system reliability and reducing manual troubleshooting time.
- Designed and implemented a reset automation tool for network devices using FortiManager, SSH, and FortiGate integrations to streamline troubleshooting and recovery processes.
- Applied DevOps practices, including Docker containerization and CI/CD pipelines, to automate deployment and ensure scalable, reproducible workflows in cloud environments.

Software Engineer for Capstone Research | SEAM Lab | (20+ hours/week) **Sep/2025 – Dec/2025**

- Developed a full-stack neural modeling platform enabling users to construct, train, and simulate attractor neural networks with real-time visualizations using React, Sigma.js, and Python (NumPy, Flask).
- Implemented backend algorithms for Hebbian learning and Hopfield network simulation, supporting dynamic energy plots and live activation updates during computation.
- Collaborated with a five-member engineering team to design the system architecture, test framework, and user interface, improving accessibility of neural network experimentation for researchers.

Projects: github.com/AbdullatifElmuaqqat

Breast Cancer Prediction Web App | Full-Stack Machine Learning (60+ hours)

- Built a production-style ML pipeline for breast cancer classification using LightGBM, integrating data preprocessing, feature engineering, and model training, and connecting model inference to a Flask backend.
- Performed comprehensive model validation and analysis using accuracy, precision, recall, F1 score, and confusion matrix visualization, ensuring interpretability and robustness of predictions across classes.

Student Life Digital Check-In System (Montgomery College) | Full-Stack Web Application (70+ hours)

- Collaborated with Montgomery College Student Life director to build a campus-wide digital check-in system using HTML, CSS, JavaScript, and Firebase, replacing paper sign-in sheets across three campuses.
- Implemented staff-facing reporting and data tools, including campus filtering, real-time visit verification, and CSV/PDF exports, improving data accuracy and reducing administrative overhead.