Meena Al Hasani

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LinkedIn

EDUCATION

University of Houston ***Dec 2025***
Bachelor of Science in Computer Science, Minor in Mathematics ***Major GPA: 3.4064***
Relevant coursework : *Algorithms and Data Structures, Software Design, Database Systems, Data Science I & II, Statistics, Software Engineering, Artificial Intelligence, Intro to Petroleum Engineering*

SKILLS

Languages: Python, JavaScript, TypeScript, C++, C#, SQL, MATLAB
Frameworks/Libraries: React, PyTorch, TensorFlow, ASP.NET Core, Express.js, Node.js, Jest, Tailwind CSS
Tools/Platforms: Git, Jupyter Notebook, MySQL, Azure SQL, Microsoft Office (Certified), WebGL, JWT
Other: Fluent in written and spoken Arabic
Dean's List: Fall 2019, Spring 2020, Spring 2021, Fall 2024, Spring 2025

PROJECTS

Unemployment Forecasting Using ML | ***Python, TensorFlow, LSTM, GRU, Matplotlib*** ***Feb 2025 – May 2025***
• Built industry-specific LSTM/GRU models to forecast unemployment trends, achieving under 10% MAPE in key U.S. sectors.
• Engineered time series preprocessing pipelines, enabling sector-based seasonal and trend detection.
• Visualized model outputs and confidence intervals to support economic insight and workforce planning.

Stock Price Prediction | ***Python, GRU, pandas, Seaborn, Matplotlib*** ***Mar 2025 – May 2025***
• Led team of 3 to train GRU-based models forecasting AAPL, MSFT, and AMZN stock with <2.2% MAPE.
• Implemented time-window encoding and lag feature engineering for sequence modeling.
• Designed interactive trend visualizations for interpretability of short-term vs. long-term forecasts.

Hurricane Impact Analysis | ***Python, scikit-learn, pandas, geopandas, Matplotlib*** ***Nov 2024 – Dec 2024***
• Modeled hurricane risk using regression and clustering on Gulf Coast weather data from 2021.
• Generated heatmaps and region-level intensity trends using GIS visualizations.
• Delivered a comprehensive report identifying hotspots and temporal storm pattern shifts.

Zoo Database Web Application | ***C#, ASP.NET Core, Razor, Azure SQL, Entity Framework*** ***Sep 2024 – Dec 2024***
• Led team of 5 to build a full-stack multi-role portal for zoo staff with dashboards, shop pages, and reporting tools.
• Connected inventory and user-role logic with relational queries and dynamic content rendering.
• Implemented real-time filtering and shop-specific data views using Entity Framework LINQ queries.

Volunteer Web Portal | ***Node.js, Express.js, MySQL, JWT, Jest*** ***Jan 2025 – Apr 2025***
• Developed secure RESTful APIs for volunteer registration, login, and event management with MySQL backend.
• Applied JWT-based authentication and route-level authorization to protect user roles.
• Achieved 100% Jest test coverage across routes and utilities, improving deployment confidence.

Space Debris Visualization Tool | ***JavaScript, WebGL, D3.js, CSV parsing*** ***Aug 2022 – Nov 2022***
• Created an interactive 3D globe visualization app for global space debris statistics by country.
• Parsed satellite data into clustered bar/scatter plots, enabling visual filtering by region and altitude.
• Enhanced user experience with globe rotation, zoom, and clickable satellite clusters.

Rocket Game | ***C++, OOP, SDL*** ***Dec 2021 – Feb 2022***
• Designed an object-oriented game simulating rocket navigation with gravity, collisions, and scoring.
• Applied polymorphism for modularity across obstacles, projectiles, and movement logic.
• Tuned difficulty scaling and performance for real-time gameplay responsiveness.

ACTIVITIES

CS Girls Organization ***Aug 2022 – May 2025***
• Attend career info sessions, workshops, and student networking events.

Code Coogs Organization ***Aug 2022 – May 2025***
• Participate in programming workshops, coding competitions.

Society of Petroleum Engineers ***Aug 2021 – May 2022***
• Participate in volunteering events, technical seminars, and networking with professionals in energy and data applications.