*A qr code on a white background

Description automatically generated*Houston, TX | (832) 807-3441 | [meenaalhasani1@gmail.com](mailto:meenaalhasani1@gmail.com) | linkedin.com/in/meenaalhasani | meenaalhasani.vercel.app

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* |
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# **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**

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| **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**

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| **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. |