Mohammed Abaan

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LinkedIn | GitHub | Portfolio

EDUCATION

American University of Sharjah, UAE
Bachelor of Science in Computer Science

GPA: 3.77
August 2022 - June 2026

Honors & Awards: Chancellor's List (2023 – 2025), Dean's List (2023 – 2025)

Relevant Coursework: *Machine Learning & Data Mining, Intelligent Recommendation Systems, Web Application Development, Neural Networks & Deep Learning, Artificial Intelligence, Computer Architecture & Organization, Computer Networks, Design-Analysis of Algorithms, Data Structures and Algorithms*

EXPERIENCE

Techinal Advisor

GC International, Dubai, UAE
June 2025 – Present

- Spearheaded delivery for a dynamic SME, collaborating with leadership to gather requirements and launch both a public website and a secure intranet, implementing a responsive design and SEO best practices
- Engineered the end-to-end stack (Astro, React, Three.js, C#/.NET) with Airtable CMS; deployed through AWS products like Amplify and SES and setup security policies
- Established CI/CD pipelines, branching strategies. conducted code reviews, front-end optimization, and testing

Information Technology Intern

Etihad Water and Electricity, UAE
May 2025 – June 2025

- Created dynamic SharePoint sites and custom .NET Framework pages using HTML/CSS/JS, jQuery, and React; optimized performance with async loading and CDN integration.
- Imported, cleaned, and modeled diverse datasets in Microsoft Power BI; engineered DAX measures and built interactive dashboards to surface key operational metrics.
- Provisioned and configured hosts, clusters and VMs in VMware vSphere, managed Active Directory including user policies with Microsoft AD and ADManager Plus
- Shadowed SOC/NOC teams, monitoring ArcSight SIEM and Operations Bridge alerts, configured firewalls and Access Control Lists, and participated in IT incident ticket resolution.

Data Science Intern

Aura Technologies, Dubai, UAE
June 2024 – Aug 2024

- Analyzed and processed extensive customer datasets, ensuring data accuracy and integrity for insights
- Utilized Python, SQL, and Excel for data preprocessing, visualization, and trend analysis
- Participated in QA testing for web applications, identifying and documenting software bugs & usability issues
- Assisted in developing and executing test cases to maintain high quality and performance standards
- Generated reports on customer behavior and operational patterns to enhance data-driven strategies

Teaching Assistant

Department of Computer Science and Engineering
American University of Sharjah
May 2024 – Present

- Conducted lab sessions and tutorials to reinforce lecture material
- Provided one-on-one and group support through office hours
- Graded assignments, assessments, and projects, providing constructive feedback
- Facilitated discussions and encouraged student engagement during classes.
- Prepared and organized course materials and resources

PROJECTS

Anime Recommendation Model

- Scraped anime forums for ratings, tags, genres, and synopses, then implemented a multi-stage hybrid recommender system (non-personalized, Jaccard & TF-IDF content-based, user/item CF).
- Merged model outputs with a weighted ensemble to optimize personalization, popularity, and diversity, mitigating cold-start issues.
- Deployed as a React/Flask web app, achieving an RMSE of 1.21/10

Malware Classification using CNNs

- Converted raw binaries into uniform image inputs; conducted EDA, normalization, and applied data augmentation.
- Built and trained a custom PyTorch CNN (convolutional, pooling, dense layers with dropout and weight decay); achieved ~90 % accuracy on a held-out test set.

SmartMealz - A Meal Planning Service

- Full-stack meal-planning platform using Spring Boot MVC and Thymeleaf backed by MySQL with Bootstrap and Flexbox
- Provided REST endpoints for meal retrieval, BMI and calorie computations, and cart management
- Features a BMI calculator, calorie tracker, Stripe-ready checkout, and built with Maven

Corporate Website Launch

- Led a team to build the company's first site using Astro & React, featuring Three.js 3D animations
- Integrated Airtable as a headless CMS via AWS Lambda functions to call the Airtable API, eliminating the need for a dedicated backend
- Deployed the application on AWS Amplify, ensuring CI/CD automation and scalable hosting

Fault Detection in Grid-Tie Photovoltaic Plant Operation

- Adapted and merged datasets sourced from a published research paper into a unified CSV, handling conversions and timestamp alignment.
- Trained and compared Decision Trees, KNN, Naïve Bayes, Support Vector Machines and ANN to classify multiple fault states, achieving 99% accuracy with ANN.

CERTIFICATIONS & SKILLS

Certifications: Machine Learning, Back-End Development, IoT
Programming Languages: Assembly, C, C++, Python, JavaScript, Java, SQL, HTML, CSS
Technical Skills: Full Stack Development, Data Science, Git/GitHub, UI/UX Design, Embedded Systems & IoT
Soft Skills: Critical Thinking, Team Management, Communication, Learning Agility, Time Management & Multitasking

LINKS

LinkedIn: www.linkedin.com/in/mohammed-abaan-0245ba289
Github: https://github.com/mabaan
Portfolio: https://abaan.ct.ws