

OMAR NAGEM

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EDUCATION

B.S. Industrial Engineering (Honors) | University of Texas at Arlington

Expected: Fall 2027

GPA: 3.86 | Dean's List, College of Engineering (Fall 2025, Spring 2026)

Relevant Coursework: Operations Research, Systems Engineering, Decision Analysis, Data Analysis, Engineering Probability & Statistics, VBA for Engineers, Python, Project Management, Enterprise Design.

CORE CAPABILITIES

- **Engineering & Problem Solving:** Process Improvement, Systems Analysis, Work Measurement, Time Studies, Workflow Analysis, Root Cause Analysis, Statistical Analysis, Operations Research
- **Data & AI:** Python, SQL, VBA, Excel, pandas, NumPy, scikit-learn, Machine Learning, Data Analysis
- **Technology Development:** TypeScript, JavaScript, React, Next.js, PostgreSQL, Prisma, Git
- **Engineering Design:** AutoCAD, SolidWorks, Arduino, 3D Printing
- **Business & Operations:** Inventory Management, Process Optimization, Cost Analysis, KPI Development, Workflow Design

PROFESSIONAL EXPERIENCE

Cars For Less Inc.

Arlington, TX

Operations Lead

Aug 2025 – Present

Operations Assistant

Sep 2022 – Aug 2025

- **Designed, developed, and deployed a full-stack dealership management system (web/app) with AI-assisted development** using Next.js, React, TypeScript, Prisma, PostgreSQL, and Tailwind CSS; now live at Carsforlesstexas.com and supporting inventory management, VIN decoding, image optimization, and administrative workflows.
- **Oversee daily operations across a 140+ vehicle dealership**, including inventory management, pricing, DMV processing, title work, and quarterly tax compliance.
- **Designed and implemented a 3-phase operational improvement plan** targeting reconditioning workflow, inventory visibility, and customer experience.
- **Built a centralized VBA/Excel database** for inventory valuation, cost tracking, and pricing decisions, replacing fragmented manual records.
- **Analyze recurring customer complaints and adjust service processes** to address underlying issues and improve the customer experience.
- **Mobilized a team within 24 hours during an operational disruption**, safeguarding \$50,000+ in business assets and maintaining business continuity.

Dallas Fort Worth International Airport

Dallas, TX

Field Research Intern (project-based)

Aug 2025 – Sep 2025

- Developed an **Excel-VBA data collection tool** that reduced passenger-flow data processing time by **more than 50%** while maintaining **98% accuracy**; presented findings to airport leadership for operational planning.
- Created a **seat-condition heat map** using AutoCAD and VBA to visualize maintenance needs and support prioritization across terminal zones.
- Analyzed passenger checkpoint layouts using **AutoCAD and time-study data** as part of operational planning for the One Stop Security (OSS) initiative.
- Conducted peak-hour passenger-flow time studies and presented efficiency recommendations to airport management.

Inspired / Higher Education Servicing Corp

Arlington, TX

High School Mentor

Jan 2026 – Mar 2026

- Guided **25+ DFW high school students** through college applications, financial aid, and scholarship processes; served as a liaison among students, families, and school counselors.

LEADERSHIP & INVOLVEMENT

Engineering Senator, UTA Student Government

2026 – Present

- Elected to represent engineering students in UTA Student Government.

Founding Officer & Treasurer, SPWLA DFW Student Chapter

2025 – Present

- Set up chapter finances and organized professional events linking 20+ students with industry geoscientists and engineers.

The Clear Islam (UTA)

Vice President

Fall 2026 – Present

Treasurer & Fundraising Chair

Fall 2025 – Spring 2026

Volunteer

Fall 2024 – Spring 2025

- Progressed from volunteer to executive leadership; oversee chapter strategy, officer coordination, budgeting, and campus programming.
- Managed the chapter budget and organized educational dialogue events engaging **100+ students per semester**.

Member: Institute of Industrial and Systems Engineers (IISE) | Entrepreneur Club (UTA).

SELECTED PROJECTS

Campus Location Efficiency Study

Fall 2025

- Led a time study with full statistical analysis (t-tests, chi-square, F-tests) to quantify efficiency differences between campus service points. Built a VBA data-collection tool, coordinated a 3-person team, and identified a 22% efficiency gap.

Robotic Arm Design & Build

Spring 2026

- Directed a 4-person team through mechanical design (SolidWorks), 3D printing, assembly, and Arduino servo control. Delivered a functional arm on budget that completed a cup-flip task.

Machine Learning: Vehicle Fuel Economy Prediction

April 2026

- Developed and compared Random Forest, KNN, and SVR models to predict vehicle fuel economy using 40,000+ EPA vehicle records; evaluated performance using R², RMSE, and MAE, with Random Forest achieving an R² of 0.9366; co-authored and presented a research poster at the UTA College of Engineering Innovation Day.

HONORS

- Dean's List, College of Engineering (Fall 2025, Spring 2026)
- American Dream Scholarship (2024)
- Freshman Distinction Roll (Fall 2024), Honor Roll (Spring 2025)