

Gage Howe

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EDUCATION

B.S Computer Science @ Texas A&M University

Aug 2022 - May 2026

Program Design, DSA, Computer Organization, Database Systems, Programming Languages, Computer Graphics, Software Engineering, Computer Systems, Design and Analysis of Algorithms, Research, Operating Systems, Robotics and Spatial Intelligence, Scientific Computing, Artificial Intelligence, Distributed Systems

SKILLS

Programming Languages Python | Java | C++ | C | JavaScript | Rust | Golang | Bash | PowerShell

Technologies Docker | CI/CD | OpenGL | PyTorch | Git | Linux | SQL | CM | REST | SDLC

EXPERIENCE

National Oilwell Varco

June 2025 - Aug 2025

Software Engineering Intern

Houston, TX

- Built a reliable, high-throughput data pipeline between Kafka and OSI PI for real-time industrial data ingestion
- Architected a highly optimized LLM model for offline, low computation environments; requires <1GB of memory
- Developed and deployed a telemetry and logging utility now running on 300+ edge devices in production

Texas A&M University

Spring 2025, Fall 2025

Teaching Assistant

- TA for CSCE 441 - Computer Graphics for Spring 2025
- TA for CSCE - Data Structures and Algorithms for Fall 2025

TAMU Undergraduate Research Scholars

Fall 2024

Undergraduate Researcher

- Researched hardware and software solutions for accurate magnet tracking platforms for healthcare and authentication, using neural networks and particle swarm optimization techniques
- Adapted a commercially available keyboard to track the positions of magnets with a range of 6 inches and developed a program to track the position of the stylus in realtime.

NOTABLE PROJECTS

Critical Mass

Jan 2025 - Present

Lead Developer & Project Manager

- Implemented client-side prediction and rollback in C++ with a custom physics engine
- Developed an efficient, starvation-free per-client network prioritization layer and client-side physics optimizations to ensure smooth gameplay even with 1000+ tightly networked physics objects and high latency

NASA Micro-G Next Challenge

Aug 2024 - June 2025

DevOps and Networking Programmer

- Built a device to decode 406.25MHz signals and locate a distress beacon
- Performed testing and handoff at the Neutral Buoyancy Laboratory; our technology is being evaluated for use in the Artemis program
- We were the only team out of 7 to successfully complete the challenge

Galaxy Simulator

Fall 2024

- Implemented ausing C++, OpenGL, CMake, and ImGUI, as well as matrices and various laws of motion.
- Leveraged multithreading, Barnes-Hut Approximation, Octrees, and both Runge Kutta Integration to improve performance by 5000% over a naïve solution and simulate and visualize 10,000 at 90 steps per second

FrontierMap

HackUTD 2025

- Developed an iOS and web augmented reality application for finding optimal wifi extender placement in a house.
- Implemented using Next.js, Flask, OpenCV, Numpy, Scipy, and SwiftUI, with a Dockerized server deployed to Google Cloud Run

Learnix Web

HackRice 2024

- Developed an interactive platform for learning Linux commands, providing users with lessons and their own persistent sandbox Linux environment.
- Implemented using Flask, React, Docker, MongoDB, Auth0, and Terraform, and deployed to Google Cloud

AWARDS AND CERTIFICATIONS

Dean's Honor Roll

Jan 2025 - Present