Henry Moran

hmoran@email.com | +1 (936) 217-3452 | github.com/plobethus | linkedin.com/in/plobethus

Education

University of Houston   Houston, Texas
Bachelor of Science in Computer Science   **GPA: 3.75**
Transferred: Fall 2024 *Dean's List: Fall 2024*

Lone Star College   Tomball, Texas
Completed coursework in Computer Science   **Major GPA: 3.5**
Attended: 2020 – 2024

Projects

Personal Portfolio Website   *May 2025*

- Developed a full-stack portfolio site using HTML, JavaScript, and PHP, hosted on a home Apache server with MariaDB as the backend.
- Implemented dynamic content management to showcase projects, skills, and blog posts, with responsive design for desktop and mobile.
- Configured and secured the LAMP stack on a local machine, optimizing database queries and server performance.

Deadline- and Priority-Based Traffic Signal Control   *COSC 4321, Spring 2025*

- Implemented EDF and FP controllers in Python with SUMO/TraCI, modeling a four-way junction with three vehicle priority levels.
- Enforced minimum-green intervals; achieved EDF miss rates of 21.8–38.6% vs FP's 41.3–52.0%, and identified high-priority starvation.
- Technologies: Python, SUMO, TraCI, real-time scheduling theory.

LU-Dense Solver in CUDA   *COSC 4397, Spring 2025*

- Ported serial LU decomposition to CUDA using shared-memory tiling and cuBLAS, achieving a $41\times$ speedup (2.97 s) on a 5000$\times$5000 system.
- Benchmarked across matrix sizes; analyzed trade-offs in memory bandwidth and kernel overhead.
- Technologies: CUDA C/C++, cuBLAS, NVIDIA profiling, dense linear algebra.

Nano clock Generator   *November 2023*

- Designed and implemented a clock generator for Ben Eater's 6502 Breadboard computer using C++ in the Arduino IDE.

ShipNGo   *COSC 3380 February 2025 – April 2025*

- Built a full-stack web application (MySQL, Node.js, HTML/CSS) with secure user authentication and session management.
- Deployed backend and frontend on Azure Web Apps; configured Azure MySQL for scalable, secure data storage.

Work Experience

Order Fulfillment Associate   *The Home Depot*   *May 2022 – January 2025*

- Collaboratively engaged in a dynamic team environment to pick and fulfill customer and contractor orders, ensuring seamless and punctual deliveries.

- Provided exemplary customer service, addressing inquiries and ensuring customer satisfaction throughout the order fulfillment process.
- Operated forklifts with precision and safety, contributing to efficient material flow within the warehouse.

Canvasser   *Maverick Windows*   *September 2021 – December 2021*

- Engaged with residents door-to-door to promote window solutions and secure contractor appointments.
- Communicated product benefits persuasively, consistently exceeding sales targets through a customer-focused approach.

Cashier   *Whataburger*   *August 2021 – September 2021*

- Delivered exceptional customer service with a friendly, welcoming demeanor, ensuring a positive dining experience for patrons.
- Conducted accurate and efficient transactions, maintaining attention to detail during high-volume periods.
- Collaborated with team members to uphold Whataburger's commitment to quality and prompt service.

Skills

- **Programming:** C, C++, Java, Python, Lua, Javascript, PHP
- **Tools/Technologies:** Vim, Git, VS Code, Azure, Apache HTTP Server, Cloudflare, MariaDB, MySQL
- **Soft Skills:** Problem-solving, teamwork, communication

Extracurricular Activities

Member   *Cougar CS*   *January 2025*