

Luisangel Esparza

luisangel.college@gmail.com | linkedin.com/in/luisangele | github.com/LuisangelE-04 | luisangelesparza.com

EDUCATION

University of Houston

Houston, TX

Bachelor of Science, Computer Science
Minor, Software Engineering

Expected December 2026

Relevant Coursework: Software Design, Database Systems, Algorithms and Data Structures, and Operating Systems

WORK EXPERIENCE

Information Technology Intern

June 2024 – August 2024

Harris County Precinct 2 Houston, TX

- Developed and implemented a **real-time** network monitoring solution, resulting in a 30% reduction in network downtime.
- Integrated and deployed a **vehicle tracking system**, allowing for real time tracking and reports of precinct vehicles.
- Resolved **50+** hardware issues and trained over 50 staff across **13 sites**, improving overall operational efficiency.

Coding Instructor

January 2025 – May 2025

Coder Kids Houston, TX

- Instruct **22 K-5 students** per week on core and fundamental computer science topics through a series of projects.
- Maintain weekly progress **reports** for parents, fostering open **communication** and the students development.

PROJECT EXPERIENCE

Master Mind | C#, ASP.NET, .NET, svn

August 2024 - September 2024

- Implemented **test-driven development(TDD)** with **NUnit**, creating **25** unit tests, reducing bug detection time by **24%**.
- Created a **RESTful API** for game logic, enabling seamless integration of game functionality into diverse front-end apps
- Designed a interface that enhanced user experience through intuitive controls through vanilla **HTML** and **CSS**.

Ship It! | ReactJS, Express, MySQL, aws, HTML, CSS, Git

August 2024 - November 2024

- Developed a responsive and dynamic multipage **shipping service** with an intuitive user experience.
- Optimize database performance by implementing normalization and indexing, ensuring **data integrity** across **12** tables.
- Led a **team of 5** by fostering a collaborative environment through weekly meetings, ensuring project deadlines are met.

Portfolio Website | HTML, CSS, JavaScript

- Designed and developed a responsive and modern personal website, showcasing my experiences and involvement.
- Utilized vanilla HTML, CSS, and JavaScript to show strong foundational skills in web development.

Rate Monotonic Scheduling | C++, Git

January 2024 - February 2024

- Developed a **multi-threaded** system to simulate task scheduling using the Rate Monotonic Scheduling algorithm.
- Designed a **client-server** system for task processing through optimized **buffer management**, reducing overall latency.
- Achieved efficient scheduling through **thread synchronization**, avoiding race conditions and deadlocks.

Leadership & Involvement

CougarCS Algorithms Workshop Director

January 2024 – May 2025

- Direct exam workshops for **algorithms** course, providing valuable study resources and ensuring student success.
- Coordinate a team of **4+** tutors to effectively produce high quality workshops and represent our impact as a club.

CougarCS Operations Team

September 2024 – May 2025

- Executed 30+ social, corporate, and technical club events since I joined, ensuring smooth operations and good experiences for club members and attendees.

TECHNICAL SKILLS

Languages: C++, Python, C#, SQL, JavaScript, TypeScript HTML, CSS

Libraries and Frameworks: React, Flask, .NET, ASP.NET, Express

Developer Tools: Git, SVN, MySQL, Docker, Postman, Windows Subsystem Linux