

# Francisco Mustico

Southfield, MI | +1(248)-289-2521 | [franciscomustico@gmail.com](mailto:franciscomustico@gmail.com) | [linkedin.com/in/francisco-mustico](https://www.linkedin.com/in/francisco-mustico) | [github.com/franmust](https://github.com/franmust)

## EDUCATION

### Lawrence Technological University

Expected Graduation: May 2027

*Bachelor of Science in Computer Science - Software Engineering*

*Southfield, MI*

- GPA: 4.0 / 4.0
- Computational biology analysis, OOP, Mathematics and data science for decision making, Software Construction and Decision Making, Implementation of Computational Methods, Device Interconnection, Algorithms and Data Structures. [Link to courses](#)

### Varsity Golf Player

Southfield, MI

*Lawrence Technological University Athletics*

*Jan 2024 - Present*

## EXPERIENCE

### STEM Ambassador

Jan. 2024 – Present

*Marburger STEM Center, Lawrence Technological University*

*Southfield, MI*

- Executed a comprehensive strategic STEM outreach initiative aimed at enhancing community engagement.
- Successfully increased community participation by 20% within the designated time frame.
- Improved community engagement and collaboration as evidenced by consistent positive feedback by the community and an increase in student interest by 35% towards the program.

## PROJECTS

### Arm-Car AI

Dec. 2023

- Developed a robotic arm utilizing **Arduino** and servo motors to achieve precise manipulation in various tasks.
- Engineered an **autonomous cart** equipped with a camera and **AI for object detection** and manipulation, employing YOLOv4 for robust obstacle detection and navigation.
- Employed **HTML, Javascript and CSS** to allow user interaction with the robot.

### MathStudentHelp

Jan. 2023

- Created **Python-based** educational software for PAA test prep, optimizing learning experiences.
- Utilized CSV data storage, Pandas, and **adaptive algorithms** to enhance learning, providing over 150 questions.
- Achieved **enhanced adaptive learning** capabilities, tailoring content to individual needs and progress while enabling the program to recognize and address user errors for continuous improvement.

### Online Web Store Simulation

Dec. 2022

- Created a simulation program with **modular CPP/H** files, utilizing classes for comprehensive functionality.
- Utilized **CSV files as a database** solution to store and manage product information within the simulation.
- Empowered users to engage in a lifelike virtual shopping experience akin to Amazon.

### Formula1Simulation

Oct. 2022

- Developed a MATLAB program to compute F1 car trajectories, factoring parameters like curve, velocity & angle.
- Incorporated visualization features to offer users a clear depiction of car's trajectory, facilitating informed analysis.
- Enhanced understanding of vehicle dynamics and safety through detailed trajectory analysis, identifying potential crash points and providing actionable insights.

## EXTRACURRICULAR LEADERSHIP

### Vice President, Model United Nations (MUN)

Jan. 2023 – Jan. 2024

*Instituto Tecnológico y de Estudios Superiores de Monterrey*

*Guadalajara, Mexico*

- Managed multiple teams, including finance, P.R. , social labor, and logistics, ensuring smooth event execution.
- Organized over 300 students, utilizing technologies like Microsoft Office and zoom for planning & coordination.
- Coordinated with local & major companies to secure catering & other materials, ensuring logistical needs were met.

## TECHNICAL SKILLS

**Languages:** Python, C++, Java, JavaScript, HTML/CSS, R, SQL

**Developer Tools:** Github, VS Code, Visual Studio, PyCharm

**Libraries:** Pandas, NumPy, Matplotlib