AARON HERNÁNDEZ JIMÉNEZ

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EDUCATION

Tecnologico de Monterrey (ITESM) Guadalajara, MX.
*B.S. in Computer Science and Technology **C/W**: Data Structures and Algorithms, IoT, Networks* August 2022 - Junio 2026

Relevant Coursework

- Computational Thinking and Programming, Object Oriented Programming, Statistical Analysis, Internet of Things, Algorithms and Data Structures in C++, Software Requirements, Git & GitHub master, Java Programming, Cisco CCNA 200-301 course.

PROJECTS

Arm-CarAI |ITESM| HTML-Arduino-Python-YoloV5 | Link | **November 2023 – December 2023**
Developed a robotic arm using Arduino and servo motors, alongside an autonomous cart equipped with a camera and artificial intelligence for object detection and manipulation (Details of the project and roadmap). Demonstrates advanced hardware-software integration

- Enhances abilities in Arduino programming, electronics, mechanics
- Showcases proficiency in artificial intelligence implementation

HermesAI Project | Hack-MTY | Python-OpenAI | Link | **June 2023 - July 2023**
Developed during the 24-hour HackMTY, Mexico's largest hackathon, aims to create a tool to address the challenge of summarizing extensive reports.

- Leveraged advanced AI techniques to automatically identify the most relevant information in reports and present it in a more understandable manner.
- Collaborated with the FRIDA project and other open-source programs to enhance the efficiency and accuracy of HermesAI.

Magnetic Braking Simulation | ITESM | MATLAB | Link | **June 2023 - July 2023**
Involved the creation of a computational simulation for magnetic braking, developed a simulation to gain insights into the outputs and values at different moments during magnetic braking.

- Collaborated with a team to conceptualize and design the simulation, incorporating the principles of eddy currents and electromagnetic induction.
- Implemented mathematical models based on Faraday's Law and Lenz's Law to simulate the behavior of the braking system under various conditions.

Console-Based RPG Game |ITESM| C++ | Link | **May 2023 - June 2023**
This project involved the development of a console-based role-playing game (RPG) in C++. The game was created in teams of two and incorporated advanced programming concepts, including inheritance, polymorphism, abstract classes, operator overloading, and exception handling.

- Collaborated closely with a partner to design and implement game mechanics and character interactions.
- Utilized object-oriented programming principles to create character classes with attributes.
- Implemented a variety of character types.

SKILLS

Programming Languages	C++, Python, SQL (Basic), Java, Arduino, JavaScript, HTML, CSS.
Developer tools	Github Codespaces, PyCharm, Git/GitHub, VS Code.
Languages	Spanish, English.
Libraries	Pygame, NumPy, Pandas, Vector, PyPDF2, OpenAI.