Marcelo Hernandez

marcelohdez.inq@gmail.com | marcelohdez.com | linkedin.com/in/marcelohdez | github.com/marcelohdez

Education

Florida International University, BS in Computer Science

Aug 2024 - May 2027

- Relevant Coursework: Programming I & II, Data Structures & Algorithms, Object-Oriented Programming
- Activities: Society of Hispanic Professional Engineers (SHPE), INIT Technology Club

Google Tech Exchange, Technical Program

Jan 2025 - May 2025

- **Selected from 200+ candidates** for this competitive immersive technical training program including technical interviewing, system architecture, software engineering, and professional networking
- Courses: Algorithms & System Design, Introduction to Software Engineering, Careers in Tech

Experience

Computer Science Tutor, Miami Dade College

Feb 2023 - Present

- Coached 100+ students on implementing data structures and creating projects using Java, C/C++, SQL, and Python
- Collaborated with a team of 10+ tutors to deliver comprehensive support across multiple programming languages
- Increased students' GPA by 20% and significantly boosted classroom participation rates

Competitions and Challenges

NASA Lunabotics Challenge 2025, as part of FIU Panther Robotics

github.com/FIU-Lunabotics/FIU-Luna0

Developed **client-server architecture** for a lunar rover with **a team of 15+ people**, adding real-time controller communication between a remote operator and an onboard Arduino through a Raspberry Pi server, enabling precise motor control.

ICPC 2022 USA Southeast Regional, as part of MDC CyberSharks

Won silver medal in Division 2 with my group of 3 teammates, solving the proposed challenges using Java and Python.

Projects

atmpt | Rust, Github CI, Command-Line

github.com/marcelohdez/atmpt

- Developed a Rust command-line tool that creates **temporary coding projects**, and opens them in your editor, leading to an **increase in productivity by 40%** for programming tutors demonstrating concepts.
- Implemented CI/CD pipeline with GitHub Actions for automated testing and deployment.

Bedroom | Java, Swing API

github.com/marcelohdez/bedroom

- Developed a **zero-dependency Java application** for call center agents to track their orders and breaks with the ability for **interactive data visualization** to view performance trends over time.
- Implemented customizable UI and shortcuts, improving productivity and reducing manual calculations.

Define4Me | *Java, MVC, JSON, REST API*

github.com/marcelohdez/Define4Me

- Built a dictionary application using Java and MVC architecture that leverages the Free Dictionary API to define word lists.
- Implemented JSON parsing to efficiently process API responses and present definitions in a user-friendly format.

dim | Rust, Github CI, Command-Line, TOML Parsing

github.com/marcelohdez/dim

- Created a native Wayland screen dimmer in Rust with a **command-line interface** that includes settings for opacity and duration, also configurable using **TOML parsing** for a user configuration file.
- Established automated testing through GitHub CI to ensure compatibility across different Linux distributions.

ImageToText | Java, MVC

github.com/marcelohdez/ImageToText

- Developed a Java Swing application using a clean **MVC architecture** that converts multiple image formats to be output as **customizable ASCII text art** which can then be copied to the user's clipboard.
- Utilized Java's ImageIO library to process various image types with customizable text output options.

Skills

Languages: Java, JavaScript, TypeScript, Python, Go, Rust, C/C++, Bash, SQL

Technologies: React, NextJS, Vercel, Git, GitHub, Linux, IntelliJ, Vim, Streamlit, BigQuery