# JULIÁN ROJAS SOTO

+52-6672108635· a01740757@tec.mx · https://github.com/A01740757

## **EDUCATION**

#### Instituto Tecnológico de Estudios Superiores Monterrey

Bachelor's Degree in Computer Technologies Engineering (Currently Pursuing) Relevant Courses:

August 2021 - June 2026 GPA 85.15/100

- Object-Oriented Programming
- Data Structures and Fundamental Algorithms
- Internet of Things Implementation

# **SKILLS**

- $\bullet \ \ \textbf{Programming Languages:} \ Python, JavaScript, HTML, CSS, C\#, C++, R, Matlab,\\$
- Frameworks: Flask, Express, React, .NET,
- Databases: MySQL, Microsoft SQL Server
- Tools: Node.js, GitHub, Google Cloud, Postman, Unity, Excel
- Languages: English level C2 Advanced, Spanish Native

## NOTABLE PROJECTS

## **Multi-Agent Warehouse Simulation**

#### August 2024 - September 2024

- **Developed an autonomous warehouse** simulation using Python and Unity, integrating Q-Learning to train robots for optimal task handling and collision avoidance.
- Designed an intelligent Q-Learning policy enabling robots to dynamically adjust their paths, optimize task allocation, and minimize manual routing efforts.
- Enhanced the system's flexibility with real-time data analysis and 2D/3D visualizations, allowing robots to continuously learn and improve task execution autonomously.

# "Web Application for Streamlining Faulty Device Diagnostics Reporting" February 2024 – May 2024

Developed, in collaboration with a team, a web application using React JS and Express to streamline the
process of submitting and modifying reports on faulty device diagnostics performed by technicians. Designed
an intuitive admin panel for real-time monitoring and management of report updates, utilizing SQL Server on
Firebase cloud for efficient data handling and reporting. Integrated various technologies such as React JS,
Express, and third-party APIs to ensure seamless communication between technicians and the management
team, improving the efficiency and accuracy of maintenance reporting.

#### **Distributed Store System using Erlang**

February 2024 – May 2024

Developed a distributed store management system using Erlang, consisting of three nodes for managing store
operations, partners, and products. The system handled product registration, inventory management, and
partner subscriptions. Each node communicated efficiently to process orders, update product quantities, and
manage store activities in real-time, ensuring high availability and fault tolerance.

# LEADERSHIP AND ACTIVITIES

# Leadership in Multigenerational Teams

June 2024

• Led efforts to improve collaboration and communication across diverse age groups, promoting teamwork and conflict resolution in a multigenerational setting.

# **Regional Chess Tournament Participation**

February 2024 - Present

• Competed in regional chess tournaments, enhancing strategic thinking, decision-making, and problem-solving skills.