

# Hector S. Lazcano

Full Stack Developer

Last updated in October 2025

📍 College Station, Texas    ✉ hectorslqm@gmail.com    ☎ +1 (979) 326-2670

🌐 [github.com/hectorslqm](https://github.com/hectorslqm)    [in linkedin.com/in/hector-lazcano-qm](https://www.linkedin.com/in/hector-lazcano-qm)    🌐 [hector-lazcano.vercel.app](https://hector-lazcano.vercel.app)

## Summary

Passionate and results-driven **Full Stack Developer** with 7+ years of experience delivering robust, scalable, and high-performance web applications and APIs. Holds a **B.Eng. in Electronics Engineering**, combining technical precision with a product-focused mindset. Experienced working in Agile and cross-functional teams, leading projects, and mentoring junior developers. Highly aware of the importance of data management in generating **actionable insights** and new knowledge. Eager to leverage this experience as a foundation to advance into machine learning and artificial intelligence, applying robust engineering practices to develop intelligent, data-driven solutions.

## Education

**B.Eng. Electronic Engineer (11329606)**

2012-2017

Instituto Tecnológico De Puebla, Puebla, Mexico

## Skills

**Frontend:** React, Next.js, TypeScript, JavaScript, Tailwind CSS, Material UI, Daisy UI, Shadcn UI

**Backend:** Node.js, Python, Java, Javascript, Express, REST APIs, Oracle SQL, PostgreSQL, MySQL, SQL Server, MongoDB

**Cloud & Tools:** Azure, Git, GitHub, Bitbucket, CI/CD, VSCode, Linux command line

## Experience

**Texas A&M Transportation Institute**

*Software Applications Developer II*

College Station, Texas,  
USA

Apr 2022 – Present

Promoted from **Software Developer I** to **Software Developer II**, leading a team of developers while contributing across the full stack. I **designed and implemented a complete system** for vehicle travel times data analysis, consisting of two components: a **multithreaded Python service** that collects UDP data streams from vehicles and stores them in a PostgreSQL database, **handling large volumes of real-time data**, and a **separate Python API** that processes the collected data to generate accurate typical travel times using Flask, Pandas, Polars and dynamic mathematical models.

I also develop **high-performance, real-time dashboards** with React, NextJS, TypeScript, Tailwind CSS, and Shadcn UI, optimized for SEO and user experience. Additionally, I manage database design, Linux Azure server configurations, and CI/CD pipelines with GitHub Actions, ensuring scalable and reliable deployments. My work spans the full lifecycle of data ingestion, processing, and visualization, delivering actionable insights that inform transportation research and decision-making.

**SOFICO**

*Java Core Developer*

Puebla, Puebla, Mexico

Dec 2019 – Apr 2022

Took ownership of the **core backend** of Miles, a large-scale vehicle leasing system used not only by Volkswagen Mexico but also by other automotive companies worldwide. I designed and implemented new features, improved business logic, and ensured reliability across mission-critical processes. I solved complex debugging challenges and delivered high-impact solutions, including a major update to the **Annex 20 electronic invoicing module**, a key regulatory requirement in Mexico. Additionally, I optimized data processing and **Oracle SQL queries** to enhance performance and support the evolving functional and compliance needs of the platform.

Maintained and modernized legacy code, significantly **raising system stability and code quality**, while collaborating closely with distributed international teams in **Agile** sprints, delivering backend solutions across multiple countries and time zones for various automotive clients.

## BURY Technologies

Automation & Maintenance Engineer

Mielec, Poland  
Jan 2019 – Aug 2019

Designed and implemented **C# interfaces** for **Modbus communication** and **Mitsubishi PLC integration**, enabling precise monitoring of signals and cameras across the production line. I also configured sensors and developed **production monitoring software** using **Delta PLC**, ensuring real-time visibility of operational performance.

Performed preventive maintenance on production equipment, proactively identifying and addressing potential issues to maximize **operational uptime** and support smooth manufacturing processes. My work contributed to both the reliability of automation systems and the efficiency of production monitoring.

## El Faro Ferreterías

Freelance Software Developer

Ciudad Mendoza,  
Veracruz, Mexico  
Sept 2017 – Jul 2018

Designed and implemented a comprehensive **personnel and attendance control system** using **Java and MySQL**, integrating **biometric authentication** with a Digital Persona U.are.U 4500 scanner. This system served as a key complement to the company's HR processes, accurately tracking employee hours and improving administrative efficiency.

Enhanced and customized the company's **MyBusiness POS** software by correcting and extending its **Visual Basic** code to meet specific operational needs, streamlining daily workflows and ensuring reliable performance. Additionally, redesigned the company's logo and brand identity, delivering a modern and professional corporate image.

## Volkswagen de México

Betriebsmanagement Intern

Puebla, Puebla, Mexico  
Feb 2017 – Aug 2017

Contributed to the development of **graphical interfaces** using **PHP** supporting the administrative operations of the Betriebsmanagement system. Took a **leading role** in advising students at the Learnstation, collaborating closely with them to redesign the door subsection device used in the VW Golf paint shop, achieving 2 USD savings per device. Additionally, optimized the layout and management of personnel locker availability and created interfaces to enhance reporting and operational oversight.

## Languages

---

**Spanish:** Native

**English:** Advanced

**Polish:** Basic

**German:** Basic