

# Oscar David Hernández Rodríguez

COMPUTER SCIENCE STUDENT · ASPIRING AWS INTERN

☎ (477) 760-8225 | ✉ oscarhe@ciencias.unam.mx | 📱 OscarHeRo | 🌐 oscar-hernandez

”Curious, rigorous and eager to build software that is correct, efficient, and impactful.”

## Experience

### UNAM – Software Engineering Course

Mexico City, Mexico

TEAM LEADER – WEB APPLICATION PROJECT

Aug. 2023 – Nov. 2023

- Led a team of 5 students to build a solid academic social network using **Django** and **PostgreSQL**.
- Designed architecture and managed sprints, code reviews, and documentation in an agile environment.
- Collaborated daily using GitHub to ensure feature integration and delivery in multiple iterations.

### UNAM – Compilers Course

Mexico City, Mexico

COMPILER DEVELOPER

Feb. 2023 – Jun. 2023

- Designed and implemented a custom compiler in **Java**, for an object-oriented language created at UNAM.
- Handled lexical, syntactic, and semantic analysis, using formal grammars and OOP principles.

### UNAM

Mexico City, Mexico

TEACHING ASSISTANT – CONCURRENT COMPUTING

Feb. 2024 – Present

- Created study materials and slides to support lectures on parallelism and synchronization.
- Reviewed student assignments and theoretical problems in **C**, **Java**, and **Swift**.

## Education

### National Autonomous University of Mexico (UNAM)

Mexico City, Mexico

B.S. IN COMPUTER SCIENCE

Aug. 2020 – Expected Jun. 2026

- Currently enrolled at the Faculty of Sciences with focus on software engineering, formal reasoning, and system design.
- Special interest in distributed systems, probability, concurrent programming, and compilers.

## Projects

2023	<b>Django &amp; PostgreSQL</b> , Built a social network web application as team leader in a 4-month academic project. Applied agile delivery, user-centered design, and Git-based collaboration.	Academic Social Network
2023	<b>Java &amp; Compiler Theory</b> , Developed a full compiler for a custom object-oriented language defined by UNAM’s CS faculty, applying lexical, syntactic, and semantic analysis.	Custom Language Compiler
2023	<b>Python &amp; YOLOv5</b> , Implemented a real-time object detection system as part of an AI course, optimized for low-resource environments.	AI Object Detection
2024	<b>C, Java &amp; Swift</b> , Supported students as a teaching assistant in Concurrent Programming. Worked with multithreading, synchronization, and shared memory.	Concurrent Systems – TA

Dear Hiring Committee,

My name is **Oscar David Hernández Rodríguez**, and I'm a Computer Science student at the National Autonomous University of Mexico (UNAM), currently entering the final year of my degree. I'm writing to express my interest in the **Professional Services Intern** position in Mexico City.

I've spent the last few years immersed in computer science—coding, building, solving, and learning. But what has driven me most is the chance to work with others, to share ideas, and to build things that matter. That's why this opportunity excites me: it brings together technical challenge, collaboration, and the kind of environment where I can keep growing.

In my academic journey, I've led development projects, explored systems like compilers and concurrent programming, and helped others as a teaching assistant. These experiences have taught me how to think formally, solve problems under pressure, and communicate clearly. I believe those same skills can help me contribute to real-world AWS projects.

This summer, I'll be available full-time—and I see this internship as the perfect way to bridge what I've learned in theory with how things are built in practice. I want to be part of a team where I can learn from professionals and help create solutions that scale and serve.

Thank you for considering my application. I'd be honored to collaborate with AWS and give my full commitment to this opportunity.

Sincerely, **Oscar David Hernández Rodríguez**  
(oscarhe@ciencias.unam.mx)