

# Juan René Hernández Sánchez

jrenehs@gmail.com

+52 55 4313 8891

[github.com/JReneHS](https://github.com/JReneHS)

[linkedin.com/in/jrenehs](https://linkedin.com/in/jrenehs)

## EDUCATION

### Escuela Superior de Cómputo (ESCOM – IPN)

Engineering in Computer Systems B.S. (98.6% of credits complete)

Graduating in August 2024

GPA 3.0/4.0

## WORK EXPERIENCE

### Laboratorio de Innovación Tecnológica (LIT) de la ESCOM

Back-End Developer

CDMX, GAM, México

Jan 2022 – Dec 2022

- Proficient in Back-End development using Java and Spring Boot.
- Experienced in the maintenance of relational databases, with a specialization in PostgreSQL.
- Successful track record in tutoring and training new project members.
- Expertise extends to mentoring in Java and Spring Boot.

## MAJOR PROJECTS

### **Web App for medical appointment management**

2023

Developed a web application, as my graduation project, that automates and streamlines the creation, management, and scheduling of medical appointments for a private medical practice.

- Implemented the back-end as a RESTful API using Java, Spring Boot, and PostgreSQL;
- Developed the front-end using Angular and TypeScript;
- Conducted testing with freshman students in an introductory programming course.

### Game Of Life by J.H. Conway

2022

Developed an application for analyzing the collision of structures and particle behavior in the Game of Life.

- Constructed from scratch using Rust;
- Built the scene utilizing the ggez dependency;
- Implemented a collection of various structures and swarms of structures.

### Medical Image Segmentation using a Generative Algorithm

2022

Developed an application in Python for analyzing medical images and performing segmentation using a generational heuristic algorithm.

- Employed the Alpine Function to discriminate blank sections;
- Utilized the Minkowsky distance for the segmentation process;
- Implemented tournament selection, One Point Crossover, and genetic mutation to generate new populations.

### Corne Keyboard CRKB

2020

Personal Project: Custom Keyboard Building and Programming.

- Constructed a custom keyboard from scratch;
- Modified the firmware, written in C language;
- Implemented a Programming Dvorak key layout modification to meet personal requirements.

## SKILLS

### PROGRAMMING LANGUAGES

4 years: Java, C/C++

2 years: Rust

6 months: Go, Julia

### AWARDS AND LEADERSHIPS

- Google Foobar participant, Google Code Jam and KickStart.
- Teacher of my university Algorithm club helping +100 students each semester for 2 years.
- Teacher of violin in my university Folkloric Music club for 4 years.

### TECHNOLOGIES

HTML, CSS, Typescript, node.js, SQL, Git, Unix/Bash, JSP, Java Servlets, Spring Boot, Angular, Kotlin, Deno, LaTeX, Apache TomCat, PostgreSQL,

### ONLINE COURSES

Java Developer - JetBrains Academy (2019).  
Algorithm Designer -JetBrains Academy (2020).  
Master Angular (formerly “Angular 2”) - Udemy (2022).  
Java (Beginner, Intermediate, and Advanced) - LIT (2022).  
Spring Boot with Java - LIT (2022).  
Relational Databases with PostgreSQL - LIT (2022).  
TypeScript and Angular 2 - LIT (2022).  
Version Control Management (GIT) - LIT (2022).  
Cybersecurity Basics (SC-900) - Operación Aleph (June 2023 - Sep 2023).