

Juan René Hernández Sánchez

jrenehs@gmail.com

+52 55 4313 8891

github.com/JReneHS

linkedin.com/in/jrenehs

EDUCATION

Escuela Superior de Cómputo (ESCOM – IPN)

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

Graduating in August 2024

GPA 2.8/4.0

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

LEADERSHIP AND AWARDS

- 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

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