

HÉCTOR SAMUEL GÓMEZ CASILLAS

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EDUCATION

UNIVERSITY

Guadalajara, Mexico

- **Bachelor's Degree in Computer Engineering at the Centro Universitario de Ciencias Exactas e Ingenierías**

Expectation of graduation: July 2025

PROFESSIONAL EXPERIENCE

FREELANCER

Rugby Inteligente

January 2023 – November 2023

- I created a website for the Rugby team of the Centro Universitario de Ciencias Exactas e Ingenierías using HTML and CSS for the frontend, and JavaScript and PHP for the backend.
- I organized and developed the neural network with Tensorflow for Rugby player ranking within the website.
- I performed the process of uploading the web site to the network using Hostinger and managing its interface to edit files.

Producer/consumer model

Abril 2023

- I developed a program in C# and .Net that exemplifies the producer-consumer problem, which is a classic example of a multiprocess synchronization problem. The program describes two processes, producer and consumer, both sharing a finite size buffer.

Regular Expression Analyzer

Agosto 2023

- I developed a program in C# and .Net to analyze regular expressions, which are a sequence of characters that form a search pattern.

Software for Scales

September 2023

- I created a program for the company "Robótica, Automatización y Metrología, S.A. de C.V." that consists of a communication through COM ports from a scale Rice Lake 920i.
- I used the C# language and .Net Framework to create the frontend and the backend.

Lexical Analyzer

September 2023

- I developed a lexical analyzer with C# and .Net, which is the first phase of a compiler, consisting of a program that receives as input the source code of another program and produces an output composed of tokens or symbols.

Figura Area Calculator

February 2024

- I developed a simple program in C# and .Net that calculates the area of 4 figures (Polygon, Square, Triangle and Rectangle).

Data analysis support

May 2024 – August 2024

- I supported the researcher Graciela Lara Lopez in the analysis of data to measure the excessive use of video games in the university community at the Centro Universitario de Ciencias Exactas e Ingenierías.

MORE EXPERIENCE

- **3D Design and Animation:** I made a 3D animation with elements that I modeled myself in Blender of Mario Bros, specifically a bomb, a mushroom and a pipeline. I also made a 3D polygonal model of an island with a lighthouse in the middle of the ocean and a short animation to show a 360° view.

ADDITIONAL INFORMATION

- **Languages:** Spanish (Native), English (B2)
- **Computer skills:** MS Office Suite (Excel, PowerPoint, Word), Visual Studio, Blender, MediaBang Paint
- **Github:** <https://github.com/HSamuelGomezC?tab=repositories>