

Silvana Dorita Ruiz Olivarría

silvanadorita@hotmail.com

+52 662 225 4598

<https://www.linkedin.com/in/silvana-ruiz-27b09320a/>

<https://github.com/Silvana-Ruiz>

Programming Languages

2 years: **Python** and **C++** (beginner)

1 year: **Matlab** (beginner)

6 months: **R** (beginner)

EDUCATION

Instituto Tecnológico y de Estudios Superiores de Monterrey

Anticipated June 2024

B.S. in Computer Science and Technology

GPA 99.72/100

Scholarship for the Distinction of Academic Merit

August 2020

MAJOR PROJECTS

Scope of Suez Canal Ports in C++

October – November 2021

- Formed and lead a team with other two students to identify the scope of all the possible routes a ship could take based on the maximum ports that could be visited.
- Implemented a graph through an adjacency list and coded a recursive function to identify the visited ports.

Golden Quest: Text-based Videogame in C++

April – June 2021

- An interactive-story videogame was programmed by a team of two, the game had four rooms with four random riddles each, and used classes, inheritance, polymorphism, pointers, and default constructors.
- Coded the classes, the fight where random amounts of “lives” were subtracted when the character was attacked, and created the story of the game.

Data Analysis of the Lung Capacity of Child Smokers in Python 3

May 2021

- Formed and managed a team of three people to classify smokers and nonsmokers into people with low, moderate, and high lung capacity by using the **K-means algorithm** (k=3).
- Visualized and analyzed data through scatterplots, histograms, a heat map, and boxplots using the libraries “**pandas**”, “**matplotlib**”, “**seaborn**”, and “**numpy**”.
- Interpreted the results and reported them.

Analysis of the Genome Sequence of the SARS-COV-2 Virus and its Variants using R

March – April 2021

- Formed and managed a team with three students and conducted an analysis which helped identify the similarities in the genome sequences of the variants using data from the nucleotide database of the NCBI.
- Implemented data visualization by coding a phylogenetic tree, nucleotide content, distance matrix, and heat maps by using the “**phytools**”, “**ggplot**”, and “**seqinr**” libraries, interpreted and co-authored the final paper.

Sales System for an Auto Part Distributor in C++

February – March 2021

- Formed a team of two to develop a sales system that generated bills and identified the best and worst seller, client, and product by reading files, using classes, vectors, and pointers.
- Coded the menu of options and the functions that determined the best and worst seller, client, and product.

LEADERSHIP EXPERIENCE

Computer Science Representative

December 2021 - Present

- Selected among outstanding students to represent all the computer science undergrads in Tec de Monterrey’s Campus Sonora Norte.
- Collaborated with the representatives of other majors to organize events like conferences with industry professionals and activities to promote the integration of students within the major.

Member of the **Women for the Future** Tec de Monterrey Western Region Student Council

August 2021 – Present

SKILLS & OTHERS

Softwares

Github (beginner), Tableau(beginner),

Microsoft Office Excel (advanced),

Minitab (beginner), and Orange (beginner)

Awards

Student Leader in the Women for the Future Community (Tec de Monterrey)
October 2021

Honorable Mention in the Hack4Her Hackathon (GirlUp Tec de Monterrey)
June 2021

Highest GPA 99.72 in B.S. in Computer Science and Technology (Tec de Monterrey) August – December 2020 and February – June 2021