

Gerardo Armando Guerrero Álvarez

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Mexico City

Education

INSTITUTO TECNOLÓGICO AUTÓNOMO DE MÉXICO, ITAM

Mexico City

August 2021 - Present (Fall 2025)

Major in Data Science - sixth semester

Academic Scholarship - 100%

GPA: 9.75

Relevant coursework: Advanced Calculus (single variable and multivariable), Advanced Probability, Lineal Algebra, Advanced Data Structures, Databases (SQL, NoSQL), Intermediate Microeconomics, Macroeconomics, Market Design.

FACULTAD DE CIENCIAS, UNAM

Mexico City

August 2019 - July 2021

Completed 2 years of the Physics degree, then I applied to ITAM where I got a full scholarship, and paused my studies at UNAM.

I was invited to represent the Faculty of Sciences at the Opening Ceremony of the 2019-2020 Academic Year, led by Dr. Enrique Graue, Rector of UNAM, due to being one of the top students of the incoming class.

ESCUELA NACIONAL PREPARATORIA PLANTEL 6 “ANTONIO CASO”, UNAM

Mexico City

August 2016 - July 2019

Final GPA: 9.96

First place in Knowledge Exam: Physics IV - Interpreparatory Contest 2018-2019.

Gold Medal in Biology - 8th University Knowledge Olympiad. Qualified through a theoretical exam at the campus level and excelled in both the theoretical and experimental components of the final competition.

Engaged in scientific research through occasional participation in the "Youth toward Research" program, working on projects in Biology and Physics.

Relevant Experience

ITAM, Economics Department

Undergraduate Teaching Assistant

Provided one hour of tutoring to students who needed help with macroeconomic theory once a week.

PROJECTS:

• Mexican Polarization :

July 2023 - Present

Engaged in a project aimed at measuring polarization in Mexico through various sources such as news articles, social media, and more, utilizing Natural Language Processing (NLP) techniques in Python.

• AVL Tree :

Implemented AVL (Adelson-Velsky and Landis) tree data structure in Python. This involved designing and coding the self-balancing tree to ensure efficient insertion, deletion, and retrieval operations while maintaining balanced height properties.

• Calculator:

Built a functioning calculator interface that worked with stacks and postfix notation in Java. Learnt how to collaborate in Github remotely with multiple teammates.

• Sudoku Solver:

Developed a Sudoku solver using recursion and backtracking in Python.

Technical Skills

Python, Java, SQL, LaTeX

Excel, Word, Powerpoint

OS: MacOS, Linux, Windows

Language Skills

Spanish: Native

English: Cambridge CAE