

# Cristo Daniel Alvarado

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 [Cristo Alvarado](#) |  [UlteriorCoast18 - Portfolio](#)

Azcapotzalco, Mexico City, Mexico

## OBJECTIVE

Seeking a challenging position in Pure Mathematics or in Data Analysis to leverage my expertise in programming and statistics. Eager to contribute to innovative projects at the intersection of mathematics, computing, and practical problem-solving.

## EDUCATION

- Escuela Superior de Física y Matemáticas at Instituto Politécnico Nacional** August 2020 - January 2025  
*Bachelor's degree in Physics and Mathematics with a specialization in Mathematics (no degree conferred yet).* Mexico City, Mexico
  - GPA: 9.27/10.00
- Centro de Estudios Científicos y Tecnológicos No. 9 at Instituto Politécnico Nacional** August 2017 - August 2020  
*Technological baccalaureate with specialization in programming* Mexico City, Mexico
  - GPA: 9.03/10.00

## PROJECTS

- Cyclon: Web and App Applications developed to track hurricanes.** February 2020 - June 2020  
*Tools: Python, Node JS, Java*
  - Developed in Node JS (Web Application) and Java (Android App).
  - Applied linear regression and clustering analysis to predict hurricanes velocity and position.
  - 2nd place at the twenty-ninth contest: "Premio mejores prototipos nivel medio superior" 2020.

## VOLUNTEER EXPERIENCE

- Volunteer Teacher At Escuela Superior de Física y Matemáticas** September 2024 - December 2024  
*Instituto Politécnico Nacional*
  - Teacher in the workshop: Algebraic Topology - Introduction.
  - It allowed me to teach school students for a better and deeper understanding of the subject.
  - Skills developed: mathematical communication, pedagogical skills, research skills, time management and confidence in public speaking

## HONORS AND AWARDS

- Award** October 2024  
*Awarding the best averages of the semester*
  - Recognition for achieving a GPA of 9.18 in the academic program of the Bachelor's Degree in Physics and Mathematics during the August 2023 to January 2024 school term.
- Award** October 2023  
*Awarding the best averages of the semester*
  - Recognition for achieving a GPA of 9.11 in the academic program of the Bachelor's Degree in Physics and Mathematics during the February 2023 to July 2024 school term.
- 2° place at twenty-ninth contest: "Premio mejores prototipos nivel medio superior" 2020** August 2020  
*Instituto Politécnico Nacional*
  - Award for the development of Cyclon, a web and mobile application in charge of monitoring and predicting the movement of hurricanes at Mexican coast line.

## EXTRACURRICULAR ACTIVITIES

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- **10th Escuela Oaxaqueña de Matemáticas**

*06 January - 07 February 2025*

- Participation as a student in the hybrid school of mathematics carried out in the Instituto de Matemáticas, Oaxaca unit.

- **CIMAT's School Algebra and Singularities**

*11 - 14 November 2024*

- Participation as a student in the School of Algebra and Singularities at CIMAT Guanajuato, in a face-to-face format, held from November 11 to 14, 2024.

- **57th Congress of Mexican Mathematical Society**

*21 - 25 October 2024*

- Attendance at the 57th National Congress of the Mexican Mathematical Society, held from October 21 to 25, 2024, at the Faculty of Exact Sciences of the Universidad Juárez del Estado de Durango.

- **CIMAT's Summer School 2024**

*08 -12 July 2024*

- Participation as a student in the CIMAT Summer School 2024, Guanajuato Campus, in a face-to-face format, held from July 8 to 12, 2024.

- **CIMAT's Summer School 2023**

*10 -14 July 2023*

- Participation as a student in the CIMAT Summer School 2023, Mérida Campus, in a face-to-face format, held from July 10 to 14, 2023.

## SKILLS

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- **Programming Languages:** Python, Java, C, C++ and Javascript
- **Data and Database Systems:** Pandas (Python library for Data Analysis), SQL and MySQL
- **Specialized Area:** Abstract Algebra, Topology, Mathematical Analysis and Topological Algebra
- **Mathematical Tools:** TeX typesetting, Linux
- **Other Tools & Technologies:** Visual Studio Code, Excel and Word

## ADDITIONAL INFORMATION

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**Languages:** Spanish (Native) and English (Professional). **Interests:** Pure Mathematics, Applied Mathematics, Data Analysis and Machine Learning, Bookbinding.