

# Emilio Daza

Aspiring Applied and Computational Mathematician

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## Education

**Dartmouth College**, Hanover, New Hampshire

Major: *Mathematics*

2023 - 2027 (Expected)

**COAR Amazonas**, Peru

*International Baccalaureate (11/2021)*

2019 - 2021

- Valedictorian
- GPA: 18.57/20
- IB Diploma Score: 38/45
  - One of the highest scores from the High-Performance High Schools (COAR Network) from Peru for the class of 2021. Mentioned in the National Peruvian Journal EDUCOAR (2022).

| Subject   | Grades (Scale: 7 to 0 and A to E) |
|---|-----------------------------------|
| SPANISH A: Literature HL                          | 6 (92% - 98%)                     |
| ENGLISH B HL                                      | 7 (99% - 100%)                    |
| BUSINESS MANAGEMENT SL in SPANISH                 | 5 (84% - 91%)                     |
| HISTORY OF THE AMERICAS HL in SPANISH             | 5 (84% - 91%)                     |
| BIOLOGY SL in SPANISH                             | 6 (92% - 98%)                     |
| MATHEMATICS EE in SPANISH                         | B (91% - 95%)                     |
| MATHEMATICS ANALYSIS AND APPROACHES SL in SPANISH | 7 (99% - 100%)                    |
| THEORY OF KNOWLEDGE in SPANISH                    | B (91% - 95%)                     |

## Test Scores

- SAT Math: 800/800

- TOEFL: 110

## Awards and Honors

### Cometa Camp Scholarship

*InterCorp Management S.A.C.*

2022-2023

-One of 100 students chosen out of 2275 Peruvian applicants to receive a comprehensive college preparation scholarship (Cometa Camp) after completing five national selection rounds.

-One of only 8 students chosen from this cohort to participate in the Cometa Camp Fast Track program and apply successfully to highly selective U.S. universities in 5 months.

### Beca Cometa Scholarship

*InterCorp Management S.A.C.*

2023

- One of 2 students to receive the 2023 Beca Cometa Scholarship which covers the total costs of my undergraduate education, as well as my travel expenses and technological tools for four years. (Award Value +\$93,000 USD per year).

### Honorable Mention

*International Eduversal Mathematics Competition Senior Level. Virtual.*

2021

- Approximately 300 competitors from different countries.

### Third Place in the United Nations Human Rights Council

*Asia Youth International Model of United Nations (AYIMUN). Virtual.*

2022

- In all committees combined, there were 69 countries and approximately 700 selected delegates. I was one of the nine Peruvian representatives.

### **Honorable Mention in the WHO Committee - MITMUNC**

*Massachusetts Institute of Technology. Virtual.*

2022

- Only Latin American winner in the committee.

### **Certificate of Excellence and Diplomacy**

*Colegio Presidente del Peru (COAR Lima). Virtual.*

2021

- Most COARS (if not all), elite private Peruvian schools, and international schools competing.

### **Best Delegate in the Commission for Social Development**

*Red COAR MUN International Edition. Virtual.*

2021

- Most COARS(if not all), elite private Peruvian schools, and international schools competing.

### **LALA - Latin American Leadership Academy**

- One of the 35 selected individuals from out of 900 international applicants (3.9% acceptance rate) to be part of the Latin American Leadership Academy [LALA] VCAMP 2022.

### **Interhouse: First place at the institutional level (Location: Chachapoyas, Year: 2019) and national level (Virtual, Year: 2021)**

*COAR Amazonas and Estación COAR IB*

- House Captain of the Brown House in the COAR Amazonas (2019). One of the leaders of the Brown House team conformed by many members of the COAR Network in the National Interhouse.

## **Projects**

- **IB Group Project: Mathematical Model to Help COVID-19 Infected Individuals**

Created a model in which people through describing their COVID-19 symptoms can estimate their level of severity and know how to identify the health-center that has the amount of oxygen and type of bed they need to recover.

- Project supervised by IB Math instruction and presented to Dataton (A national Mathematical contest by the Universidad del Pacífico)

- **Use of Lotka-Volterra Differential Equations to Predict and Prevent the Extinction of Species**

Developed a project in which I proposed how to use the mentioned tool to protect species in danger of extinction. During the process of analysis, I also used computational tools such as Python and Spreadsheets. The project received a perfect score in the International Baccalaurete (IB) evaluation.

- **Detection of Saturated Fats by a Centrifugation Process and Data Analysis**

Director of the project composed of COAR Amazonas classmates. Collaborated with Toribio Rodriguez de Mendoza Peruvian National University lab resources.

## **Volunteer Experience**

### **COAR Network's Journal (EDUCOAR)**

*Writer*

2022

- Contributed with articles (including scientific ones) for almost a year in collaboration with the rest of the selected writers from the COAR Network

### **Peruvian Congress**

*Selected speaker of the Amazonas department*

2020

- I had a meeting with the Peruvian congresswoman Rocío Santisteban on the needs and demands of children and adolescents.

## Beca Cometa and Grupo Intercorp

*Cometa Fest speaker*

2023

- The Cometa Fest is a national Peruvian event that provides vocational orientation for Peruvian high school students. The 2023 edition had more than 23 000 participants, 478 287 minutes were played, and 105 high schools participated. One of the sections was a virtual interview with me where I shared my experience at Dartmouth, story of resilience, and message of hope for students from underprivileged areas of Peru.

## COAR Amazonas

*Debate Trainer of the 2022 Model of United Nations Delegation*

2022

- The members of the delegation combined obtained 5 distinctions (including a Best Delegate Award and two Best Position Paper Awards) in the 2022 COAR MUN virtual edition national competition

## Sumaq Yachay

*Debate Judge and Mentor*

2022

- Mentor of the program ABC del MUN created by Sumaq Yachay (organization recognized by the National Youth Secretariat of Peru)

- Provided training to delegates from different countries, hosted an international MUN Competition, and been the judge of it.

## Organizations

### Society for Industrial and Applied Mathematics (SIAM)

*Student Member*

Feb 2024 - Present

### CVL Counseling

*SAT Mathematics Mentor*

2022

- Taught two 17-year-old Peruvian students, one-to-one lessons on all SAT Maths topics. 6 Hours per week. Approximately 94 hrs dedicated in total.

### Quinti Learning

*Member of the Impact Evaluation Design Team*

2021

- Quinti Learning is an organization with the purpose of teaching English and Portuguese to low-income children in Latin America and is recognized by the KidsRights Foundation.

## Data Analysis Courses

### Course Title (Platform: Data Camp)

Cleaning Data in R  
Intermediate Regression in R  
Data Manipulation with dplyr  
Exploratory Data Analysis in R  
Intermediate Data Visualization in ggplot 2  
Intermediate Importing Data in R  
Intermediate R  
Reporting with R Markdown  
Working with Dates and Times in R

## Skills

- Coding: L<sup>A</sup>T<sub>E</sub>X, R-Studio, Markdown, and Python
- Languages: Spanish (Native), English (Advanced), Portuguese (Limited Working Proficiency)