# Cristóbal Lillo

Coral Gables, FL | LinkedIn | +1 (305) 481 4493 | cal390@miami.edu

#### **EDUCATION**

International School Nido de Águilas -- HS Diploma, IB diploma

Santiago, Chile (2008-2023)

• **GPA**: 3.94

**SAT:** 1490

**IB:** 39/45

**University of Miami -** B.S. in Computer Science, BS in Physics

Coral Gables, FL (2023-2027)

• **GPA**: 4.0

Honors: Singer Scholar, Foote Fellow, President's Honor Roll

• Relevant Coursework: Data Science, UI/UX design, Linear Algebra, Data Structures and Algorithms

#### **EXPERIENCE**

Math Union – [Exec]

August 2023 - Present

Helped reboot Math club in UM post-pandemic.

- Organized weekly union meetings and coordinated student-led presentations
- Brought together the University of Miami Math department for organized weekly union meetings
  - Coordinated student-led presentations on topics of interest such as the Super-Catalan Numbers and contour integrals.

## **PUTNAM Competition Team – [Member]**

November 2023 - Present

- Prepared PUTNAM competition team meetings with group practice problems and scheduled prep for 2024 exam
- Reached out to professors to participate in voluntary faculty presentations on PUTNAM content and exam strategies
  - o 2 agreed to participate as guest lecturers, giving valuable insight into the breaking down of complex problems.

# **Building and Event Support Assistant - [Employee]**

January 2024 - Present

• Collaborated with the facilities team to optimize room layouts, ensuring efficient utilization of available resources, receiving positive feedback from event organizers and attendees regarding setup quality and timeliness. Collaborated with event planners, vendors, and other staff members to ensure smooth execution of events, from room arrangement to AV setup.

### RELEVANT RESEARCH EXPERIENCE

## International Baccalaureate - Santiago, Chile

December 2021 – September 2022

- Extended Essay in Physics: "Finding the Critical Reynolds Number of Water Flow Through a Uniform Pipe"
- Physics Internal Assessment: "Investigating the Period of a Bifilar Pendulum to Find the Moment of Inertia of a Model Plane About a given Axis"

#### LEADERSHIP EXPERIENCE

# Comida Solidária - [Treasurer & Co-President]

2020 - 2023

- Oversaw over 20 visits to neighboring community to assist elderly homes afflicted by pandemic and/or social unrest in Chile.
   Managed club funds and organized all club expenditures with community representatives to understand how to best support them.

  DefHacks [Exec]
- Rebooted 2 hackathons post-pandemic; helped organize competition and participated as a judge
  - o Expanded participant pool, inviting neighboring schools to participate; 32 members in 2020 → 85 in 2023.
- Set up voluntary labs for underclassmen and taught basic applications of programming and math concepts in video games.
  - o Implemented NEAT algorithm in Flappy Bird, minimax algorithm in tic-tac-toe, minesweeper solver using matrices.

#### PERSONAL PROJECTS

**GameSolvers** - Portfolio of classic video games with algorithm and machine learning based "solvers"; made for pedagogical purposes on the basis of easy access for younger demographics.

**Chesster Buckingham** - Entry for Sebastian Lague's Tiny Chess Bots Tournament with 1024 token maximum, approximated to have 1050 ELO.

**SKILLS:** JavaScript/HTML/CSS (familiar with p5.js), TypeScript, Tailwind CSS, Vue.js, Java (JUnit for testing), Python (TensorFlow, Django), R (Tidyverse packages), C# (within Unity game engine)