

# ALEXANDER GOMEZ | Curriculum Vitae

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## PERSONAL INFORMATION

### NAME

Alexander Gomez-Del-Carpio

### NATIONALITY

Peruvian

## EDUCATION

### COMPUTER SCIENCE

Universidad Catolica San Pablo  
Between top-5 students in my class  
GPA 3.9 (Converted)  
Expecting graduation: July 2025

2019 - Current

Arequipa, Peru

## SKILLS

**PROGRAMMING LANGUAGES & OTHERS** Experienced: C/C++ | Python | SQL(SQLite) | HTML/CSS Familiar: JavaScript | Java | Matlab  
**FRAMEWORKS & TOOLS** Git | CLI | Windows | WSL (Linux) | VSCommunity | Colab | VSCode | OpenGL

## PROGRAMMING EXPERIENCE

### SQLITE IMPROVEMENT

Advanced Data Structures  
Performance issues were solved, mainly, coding an X-Tree in order to replace its R\* Tree for range queries (C and SQL). Also, in my free-time I implemented all kinds of data structures.

5/2022 - 8/2022

Coursework

### AI, CLUSTERING & SORTING

Algorithms  
Constantly designing clustering (Data analytics) and sort algorithms (Python). Furthermore, a genetic algorithm and neural networks were implemented.

8/2019 - Current

### CHOCOPYCOMPILER

Language Processing  
Implementation of a tokenizer and a parser with its parsing tree of the ChocoPy Language.

7/2023

Coursework

### RUBIK'S CUBE & PARAGLIDING

Graphic design  
It is a 3D Rubik's cube with OpenGL from scratch. On the other hand, testing and debugging as well as creating new features in Paragliding project (VR).

08/2022 - 11/2022 & 05/2023

Coursework

### RDT + UDP PROTOCOL

Network  
Implementation of Reliable Data Transfer over UDP and its benefits using C++.

12/2022

Coursework

## HONORS & AWARDS

### MATH REGIONAL CONTEST

Part of two-person school team in Math regional contest (ONEM).

2017

### SOCCER STATE CHAMPION AND CAPTAIN

Captain for 3 years of San Jose High-School Soccer Team.

2018

## LANGUAGES

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**SPANISH** Native

**ITALIAN** Advanced

**PERUVIAN SIGN LANGUAGE** Intermediate

**ENGLISH** Advanced

**PORTUGUESE** Upper-Intermediate

**SWEDISH** Elementary

## INTERESTS

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**LANGUAGES AND TRAVEL** I love discovering new cultures and making friends, at the same time, I practice my learned languages.

**SPORTS** I've been pro-soccer player (Barca Academy - USA and in Peru). In addition, I'm passionate about Formula one (I am a SIM player), tennis and many other sports.

**SCIENCE & CULTURE** I always want to learn more about Computer Science but also I am used to constantly investigate and read about astronomy and Greek mythology.