

# ÀLEX BATLLE CASELLAS

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📍 Arenys de Munt, Barcelona    in Atellas23    🌐 Webpage    📧 Atellas23



## EDUCATION

International Baccalaureate + Spanish Baccalaureate

**Institut Moisès Broggi (institutbroggi.org)**

📅 Sept 2016 – June 2018    📍 Barcelona

– Graduated with honours.

Bachelor's Degree – Mathematics and Data Science

**CFIS – UPC**

📅 Sept 2019 – ongoing    📍 FME+FIB+ETSETB

Majoring in **Mathematics and Data Science and Engineering** in a double degree 5-year study plan within **CFIS** (cfs.upc.edu), a very selective excellence center within UPC, with an average mark of **7.28/10**. Specially interested in **Deep & Reinforcement Learning, Algorithmics, Optimization, Algebraic Structures** and **Real & Functional Analysis**.

## EXPERIENCE & PROJECTS

HP Internship

**Software Engineering Intern on Robotics at HP**

📅 Summer 2021    📍 Home – remote

Built a graphical program from scratch using C++ and Qt to parse and represent ROS launch files graphically before execution. Hosted on GitHub (private repo).

**IDAO 2021**

**International Data Analysis Olympiad**

📅 Mar 2021    📍 Home – remote

Participated in the fourth edition of IDAO, achieving a good position within the 30 best teams (in public testing) in an image classification and regression task using PyTorch.

**GitHub projects**

**Programming projects hosted on my GitHub page.**

📅 Fall 2018 – ongoing    📍 The Earth

NeuralNetwork    iGo    Fantasy\_Football    CppLEX    kt

**Math & Algorithmics Activities**

**Mathematics activities as a high school student.**

📅 2014 – 2018    📍 FME, Barcelona

- *Estalmat* (estalmat.cat): Weekly advanced & extra-curricular mathematics sessions, talks & workshops for high school students.
- *Math Summer Camp* (mathactivities-bcn.tech.org).
- Algorithmics & Programming course @FIB (algotprog.jutge.org).
- AI competitions and courses @FME (coliseum.ai)

**Mathematics & Science tutor**

**Tutoring sessions for secondary and university students**

📅 Jan 2018 – ongoing    📍 Barcelona

Both paid and unpaid classes to several students, achieving good academic results. Some of this work has been done through Professors DAFME, a student-lead organization within the Student Association of the FME.

## PROGRAMMING SKILLS

C/C++  
Python  
R  
Java  
SQL  
Matlab



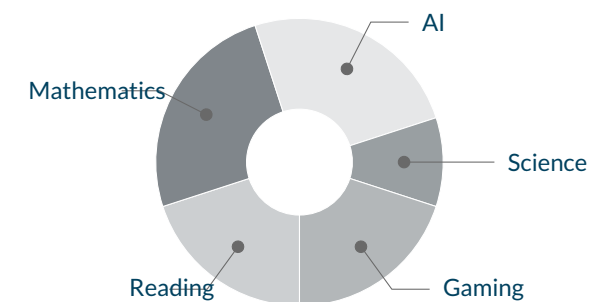
## TECHNICAL SKILLS

Latex & Markdown    Machine Learning  
Reinforcement Learning    Deep Learning  
Time Series    Multivariate Statistics  
PyTorch    Apache Spark (PySpark)    Git  
OpenMP (C/C++)    Linux environment

## LANGUAGES

- **Catalan.** Native speaker.
- **English.** Fluent speaking and writing. TOEFL exam.
- **Spanish.** Native speaker.

## INTERESTS



## VOLUNTEER WORK

Summer camp surveyor

**CE Catecolònies Sant Martí**

📅 June 2019 – ongoing    📍 Arenys de Munt, Barcelona

- Summer camp from Aug 1-10 every year.

**ACFAEC**

**Associació Catalana de Famílies i Amics d'Estalmat i les Ciències**

📅 Aug 2018 – ongoing    📍 Barcelona

- Collaboration within ACFAEC in science and math activities.