# **ÀLEX BATLLE CASELLAS**



#### **EDUCATION**

International Baccalaureate + Spanish Baccalaureate

Institut Moisès Broggi (institutbroggi.org)

**Sept 2016 – June 2018** 

Barcelona

Graduated with honours (matrícula d'honor).

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 (cfis.upc.edu), a very selective excellence center within UPC, with an average mark of 7.39/10. Specially interested in Deep & Reinforcement Learning and Algorithmics.

#### **EXPERIENCE & PROJECTS**

#### **HP** Internship

Software Engineering Intern on Robotics at HP

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 & 2022

International Data Analysis Olympiad

Mar 2021, Feb 2022

Participated in the fourth and fifth editions of IDAO, achieving a good position within the 30 best teams (in public testing) in an image classification and regression task (2021) and in a GNN regression task (2022) using PyTorch. 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-bcntech.org).
- Algorithmics & Programming course @FIB (algoprog.jutge.org).
- Al competitions and courses @FME (coliseum.ai)

Mathematics & Science tutor

Tutoring sessions for secondary and university students

Barcelona

Both non remunerated and remunerated 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, some other has been done within the CAS projects of the IB Diploma Programme, and some other has been used as a means of saving money. Other projects

Some of my programming, personal, and Uni projects.

Fall 2018 - ongoing

**♀** The Earth

iGo Fantasy Football

CppLEX kt

Random Partition Kernels paper

#### **PROGRAMMING SKILLS**

Python C/C++ R SQL Java

Matlab

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### **TECHNICAL SKILLS**

Latex & Markdown Machine Learning

Reinforcement Learning Deep Learning

Time Series Multivariate Statistics

PyTorch Apache Spark (PySpark) Git

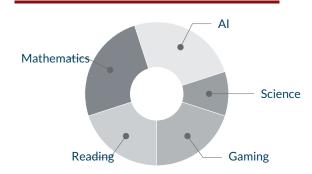
OpenMP (C/C++) TensorFlow

Linux environment

#### **LANGUAGES**

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

#### **INTERESTS**



## **VOLUNTEER WORK**

Summer camp monitor

CE Catecolònies Sant Martí

- Summer camp from Aug 1-10 every year.

**ACFAEC** 

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

 Collaboration within ACFAEC in science and math activities.