ÀLEX BATLLE CASELLAS



EDUCATION

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 7.58/10. Specially interested in Deep & Reinforcement Learning and Artificial Intelligence.

International Baccalaureate + Spanish Baccalaureate

Institut Moisès Broggi (institutbroggi.org)

Sept 2016 – June 2018

Barcelona

Graduated with honours (matrícula d'honor).

EXPERIENCE & PROJECTS

TU Delft

Research Intern

February 2023 - ongoing

Oelft, NL

Research visit to write my Bachelor's degree Final Thesis on autonomous robot exploration via RL.

Qualcomm

Engineering Intern

June 2022 - February 2023

♦ Home – remote

Work on several tasks regarding AI and telecommunication networks. $\ensuremath{\mathsf{HP}}$

Software Engineering Intern on Robotics at HP

Summer 2021

Built a graphical program 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), Math Summer Camp (mathactivities-bcntech.org).

Mathematics & Science tutor

Tutoring sessions for secondary and university students

Barcelona

One-on-one sessions with several students (university, pre-university and high school levels), achieving good results in the areas of mathematics and science. Other projects

Some of my programming, personal, and Uni projects.

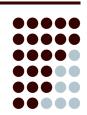
Fall 2018 - ongoing

♀ The Earth

iGo Fantasy_Football CppLEX kt Random Partition Kernels paper

PROGRAMMING SKILLS

Python C/C++ Java R SQL Matlab



TECHNICAL SKILLS

Latex & Markdown

Machine Learning

Reinforcement Learning

Deep Learning

Git

Multivariate Statistics

PyTorch

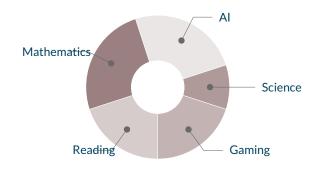
OpenMP (C/C++)

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.