# Eric Roy-Almonacid

Teacher and full-stack dev
github.com/royalmo
orcid.org/0009-0006-1486-3482

eric@ericroy.net / eric.roy@upc.edu
ericroy.net

I am currently a masters student doing research on game theory for optimization techniques for games with ordered preferences. I concurrently work at Codelearn as a full-stack developer, while also teaching some undergraduate courses at Universitat Politècnica de Catalunya (UPC).

## EDUCATION

2024– MSc in Machine Learning & Cybersecurity, Universitat Politècnica de Catalunya (UPC)

2020–24 BSc in ICT Systems Engineering, Universitat Politècnica de Catalunya (UPC)

## EXPERIENCE

2024– Universitat Politècnica de Catalunya (UPC)
Teacher
Taught courses on programmable devices (assembler) and applications and services on the internet to BSc students.

Codelearn S.L.

2021– Full-stack developer
Maintaining and enhancing a gamified web platform where kids can learn coding and computational thinking skills. One of the key tasks consists of integrating external games or platforms (both physical and online) to our infraestructure.

2020–21 Programming teacher
Introduced kids into computational thinking. This includes programming, robotics, electronics and video games, using both educative and state-of-the-art tools.

## INVITED TALKS

2025 Optimization of games of ordered preference – Iowa State University

## PUBLICATIONS

Asterisk (*) denotes equal contribution.

2025 P. de las Heras Molins*, E. Roy-Almonacid*, D. H. Lee, L. Peters, D. Fridovich-Keil, and G. Bakirtzis "Approximate solutions to games of ordered preference," IEEE International Conference on Intelligent Transportation Systems (ITSC 2025)

## OPEN SOURCE CONTRIBUTIONS

Skulpt, a Javascript implementation of the Python programming language. I improved the *turtle* library.

Translations of many projects, e.g. Rails-Admin, Rails-Translate.

Own projects. Some examples: BSc thesis, tutorials & walkthroughs, wrappers, extensions, websites.

Minor contributions to: HomeAssistant, Pyrandr, lib_iio, Ubiquo.

## REFERENCES

References upon request.