DAVID ÁLVAREZ ROSA

Mathematics and Industrial Engineering student

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🔗 david.alvarezrosa.com   🦊 gitlab.com/DavidAlvarez   🎂 October 10, 1998

EDUCATION

Degree in Mathematics   240 ECTS
Polytechnic University of Catalonia – FME

📅 September 2016 – Present   📍 Barcelona, Catalonia

- Currently in fourth grade.

Rigorous course with a robust mathematical base and providing a solid knowledge in its applications (algorithms, computing).

Degree in Industrial Technology Engineering   240 ECTS
Polytechnic University of Catalonia – ETSEIB

📅 September 2016 – Present   📍 Barcelona, Catalonia

- Currently in fourth grade.

Multidisciplinary and integrative vision of industrial engineering. Acquired knowledge and skills essential for future technological development.

Scientific and Technological Baccalaureate   2 years
Irabia-Izaga school

📅 September 2014 – June 2016   📍 Burlada, Navarre

- Final grade: 9,47/10.
- University access exam grade (*Selectividad*): 12,76/14.

Compulsory Secondary Education   4 years
Irabia-Izaga school

📅 September 2010 – June 2014   📍 Burlada, Navarre

COURSES

Game theory   20 hours
Polytechnic University of Catalonia – CFIS

📅 April 2019   📍 Barcelona, Catalonia

Game theory is the study of mathematical models of strategic interaction among rational decision-makers. It has applications in fields such as economics, logic and computer science.

Introduction to Machine Learning & Deep Learning   20 hours
Polytechnic University of Catalonia – CFIS

📅 January 2019   📍 Barcelona, Catalonia

- Basic principles of machine learning and classical methods.
- Introduction to deep learning from both an algorithmic and computational point of view.
- Study of its applications to reinforced learning and the analysis of multimedia content.

INSPIRATION

"The science of today is the technology of tomorrow."

SKILLS

Accustomed to working in a team, motivated and detailed in projects.

Programming languages.

Solid knowledge of:

C++   Python   Octave/Matlab

Notions of: AMPL   Bash

Experience in **web development**:

HTML   CSS   JavaScript   PHP

Others: Linux   Git   LaTeX

LANGUAGES

Spanish   ●●●●●
Mother tongue.

English   ●●●●◐
C1 level accreditation in August 2017.

Catalan   ●●●○○
Very good understanding of the language. Basic level in oral and written expression.

AWARDS

🏆 **Spanish Mathematical Olympiad**
📅 January 2016   📍 Pamplona, Navarre
Second position in the local phase.

🏆 **Spanish Physics Olympiad**
📅 March 2016   📍 Pamplona, Navarre
Winner of the local phase.

🏆 **Spanish Physics Olympiad**
📅 April 2016   📍 Seville, Andalusia
Silver medal in the national phase.

PROJECTS

Driverless – Motorsport   20 hours/week
Polytechnic University of Catalonia – ETSEIB

📅 September 2019 - Present

I'm part of the Perception section of Driverless UPC team, which is a team formed by undergraduate engineers in charge of the designing, manufacturing and testing of a fully autonomous car that will participate in national and international competitions between universities.

Robotic Arm – Tic-tac-toe   75 hours
Polytechnic University of Catalonia – ETSEIB

📅 January 2019 - June 2019

Creation of a virtual animation of a robotic arm intelligently playing the game of Tic-tac-toe.

Email server   15 hours
Personal project

📅 August 2018 - September 2018

- Configuration of a modern and secure personal email server based on free software (Postfix and Dovecot).
- Supports opportunistic TLS and IMAP access.

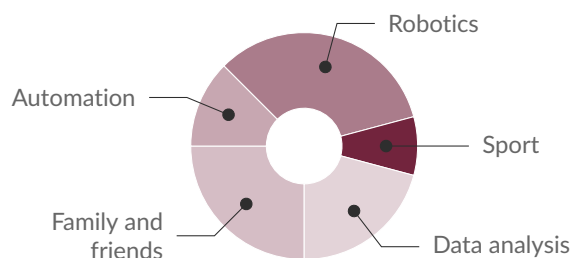## Study Schedule   60 hours
Polytechnic University of Catalonia – ETSEIB

📅 January 2018 - June 2018

Creation of a customized study schedule generator adapted to students, through data analysis.

INTERESTS

OTHERS

♪ Former violinist
📅 2008 - 2015   📍 Pamplona, Navarre

I played the violin in the conservatory in the first courses.

👥 Tutor
Academic classes of support and preparation for the Mathematical Olympiad.

🐧 Linux user
Years of use of Linux distributions (Arch, Debian y Ubuntu).

🖥 System Administrator
Administrator of personal Virtual Private Server: data synchronization between devices, web, email, personal Git server.

💓 Athlete
Regular sportsman, runner y ex-triathlete.

🚗 Driving license
📅 October 2017   📍 Pamplona, Navarre

Spanish car driving license (B).