

Education

- 2016-now **PhD. Student Computer Science**, MIT, Cambridge (US).
Machine Learning and Robotics. Advisors: Leslie Kaelbling and Tomás Lozano-Pérez.
- 2011-2016 **2 Degrees: Mathematics and Engineering Physics**, UPC - CFIS, Barcelona.
First of starting promotion in Math degree, valedictorian of 2 degree-program promotion.

Research

I am interested in leveraging unsupervised data to improve the performance of supervised and reinforcement learning systems. For example, using unsupervised data coming from the perception of a RL agent to speed up domain transfer in a continual learning setting. I've also recently worked on ML and Planning for robotic manipulation in cluttered domains.

Publications

- **Alet** et al., "Finding important entities in streaming data", *Submitted ICRA '18*
- Zeng et al., "Robotic Pick-and-Place of Novel Objects in Clutter with Multi-Affordance Grasping and Cross-Domain Image Matching", *Submitted ICRA '18*

Work Experience

- Summer 2017 **Software Engineer Intern**, Google Research, Zurich.
Designed & built 1st Unsupervised Learning prototype to create video ads from raw videos.
- 2015-2016 **Research Assistant**, MIT, Cambridge (US).
Planning and Machine Learning for robot manipulation with professor Alberto Rodriguez.
- Summer 2015 **Software Engineer Intern**, Google Research, Zurich.
Machine Learning research to improve Google's handwriting recognizer.

Most Important Scholarships and Programs

- 2016-2018 **Merit Graduate Scholarship**, 'La Caixa' foundation.
Most prestigious graduate scholarship in Spain. Full funding for two years.
- 2011-2016 **Merit Undergrad Program & Scholarship**, CFIS.
Only 40 students around Spain enter this merit program that allows you to do two degrees. Within them, I was one of the few to have full funding for both degrees.

Computer Science experience

Most important CS awards

- 2016,2017 Amazon Robotics Challenge *Built High Level Planner of team MIT finished 1st ('17) and 3rd ('16) in stowing*
- 2011-2015 SWERC-ACM (programming contest) *Silver(6th), Gold(2nd), Gold(3rd), Gold(1st), Gold(1st)*
Most decorated participant in the history of the regional (which includes Spain, France, Italy, Portugal, Switzerland and Israel)
- 2015,2016 ACM ICPC - World Finals *26th, 51th out of 128, previously qualified from ~13.000 teams*
- 2011 IOI - International Olympiad in Informatics *Bronze Medal*

Relevant CS knowledge

Python: Good level *Main language I've worked on for the last 2 years*
Tensorflow: Medium level *Using it in my current research and 2017 Google Internship*
Robot Operating System (ROS): Medium level *Used it 8 months in 2016*
Keras: Learning *Using it in my current research*
C++: Good level *Learned since I was 14*
Relevant MIT courses: Machine Learning, Computational Cognitive Science

Most Important non-CS Awards

2011 1st UPF Engineering and Applied Mathematics Prize and
1st Poincaré Prize *Research Thesis: Generating Functions and Searching Automata*
2010,2011 Spanish Math Olympiad *Silver Medal(x2)*
2011 Selectivitat Prize *6th out of > 25.000 students in the examination for entering college*

Languages

English High Level *TOEFL iBT: 115/120(2015). Living in the US since 2015.*
French High Level *Studied since I was 5 ; DALF (CEFR Level C1,2011)*
Catalan Mother Tongue
Spanish Mother Tongue
Chinese Learning *Level CEFR A2*