

## EDUCATION

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- **Massachusetts Institute of Technology** Cambridge, MA  
*Master's Thesis and Cross-registered student; GPA 4.00/4.00* Aug. 2021 -- May. 2023
  - Relevant courses @MIT: Robotic Manipulation (Prof. Russ Tedrake), Sensorimotor Learning (Prof. Pulkit Agrawal), Advances in Computer Vision (Prof. Philip Isola, Prof. Bill Freeman), Natural Language Processing (Prof. Jacob Andreas, Prof. Yoon Kim)
  - I did my Master's Thesis with Prof. Pulkit Agrawal and Prof. Abhishek Gupta at the ImprobableAI lab, MIT CSAIL
- **Harvard University** Cambridge, MA  
*Master of Engineering in Computational Science and Engineering; GPA: 4.00/4.00* Aug. 2021 – May. 2023
  - Relevant courses @Harvard : Statistical Decision Making (Prof Susan Murphy), Stochastic Method for Data Analysis Inference and Optimization (Dr Weiwei Pan)
- **École Polytechnique Fédérale de Lausanne, EPFL** Lausanne, Switzerland  
*Bachelor of Science in Computer Science; Grade: 5.62/6 (top < 3%)* Sept. 2018 -- July. 2021
- **International Baccalaureate (IB Diploma)** Reus, Spain  
*IES Gabriel Ferrater I Soler de Reus; Grade: 42/45 (highest score in the school's history)* Sept. 2016 – June 2018
  - Relevant courses : Physics HL (Grade 7/7), Mathematics Higher Level (HL) (Grade 6), Catalan Literature HL (Grade 6), Chemistry Standard Level (SL) (Grade 7), English SL (Grade 7), Philosophy SL (Grade 6)

## CONFERENCE PUBLICATIONS

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- ***Breadcrumbs to the Goal: Goal-Conditioned Exploration from Human-in-the-loop feedback***  
*Marcel Torne Villasevil, Max Balsells I Pamies, Zihan Wang, Samedh Desai, Tao Chen, Pulkit Agrawal, Abhishek Gupta*  
*Advances in Neural Information Processing (NeurIPS) 2023 / [paper](#) / [website](#)*
- ***Autonomous Robotic Reinforcement Learning with Asynchronous Human Feedback***  
*Max Balsells I Pamies\*, Marcel Torne Villasevil\*, Zihan Wang\*, Samedh Desai, Pulkit Agrawal, Abhishek Gupta*  
*Conference on Robot Learning (CoRL) 2023 [paper](#) / [website](#)*
- ***Finetuning real-world policies in sim through real-to-sim transfer. Marcel Torne Villasevil,***  
*Marcel Torne Villasevil, Anthony Simeonov, Steven Li, Tao Chen, Pulkit Agrawal\*, Abhishek Gupta\**  
*In preparation for Robotics Science and Systems 2024*
- ***Finetuning foundation models with crowdsourced human-in-the-loop feedback.***  
*Carrie Yuan\*, Marcel Torne Villasevil\*, Abhishek Gupta*  
*In preparation for Robotics Science and Systems 2024*

\* indicates equal contribution

## OPEN SOURCE PROJECTS

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- ***DISCO: Distributed Collaborative Machine Learning***  
*MLO-iGH EPFL. Project started by Marcel Torne Villasevil and Paul Mansat supervised by Professor Martin Jaggi*  
*GitHub repository available at [github.com/epfml/disco](https://github.com/epfml/disco) (105 stars on GitHub) / Bachelor thesis available [here](#)*  
Play with DISCO at: <https://epfml.github.io/disco/>

## RESEARCH EXPERIENCE

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- **Massachusetts Institute of Technology, CSAIL, Improbable AI Lab** Cambridge, MA  
*Graduate researcher supervised by Prof. Pulkit Agrawal and Prof. Abhishek Gupta*  
Feb 2022 – Present
  - I worked on three main projects, 1) leveraging crowdsourced non-expert human feedback from annotators worldwide to guide exploration; 2) real world finetuning in the real world using human feedback; 3) leveraging real-to-sim transfer of real world scenes for robustifying policies through simulation.
- **Microsoft** Bellevue, WA  
*Data Scientist Intern*  
June 2022 - August 2022
  - **Microsoft Bing:** Built the first implementation of Extreme Classification algorithms by Microsoft Research in the Image ranker of Bing.
- **EPFL - Machine Learning and Optimization Lab (MLO)** Lausanne, Switzerland  
*Bachelor's Thesis research supervised by Prof. Martin Jaggi and Prof. Mary-Anne Hartley*  
Feb 2021 - July 2021
  - Developed an open source platform in JavaScript for privacy-preserving decentralized Machine Learning in medical image classification. [<https://github.com/epfml/disco>]
- **EPFL - Formula Student Racing Team**  
*Autonomous driving team*  
Feb 2021 - July 2021
  - At the EPFL Racing Team, I pursued an individual Machine Learning Research Project. More concretely, I developed an algorithm for the Control and Planning of an autonomous vehicle using Deep Reinforcement Learning.

## SELECTED HONORS

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- **Harvard Real Colegio Complutense Scholarship** Aug. 2021 - May 2023  
*Merit-based scholarship for Spanish students studying at Harvard. Covers around 70% of the Master's tuition.*
- **Harvard IACS Master Thesis proposal award** Aug. 2021 - May 2023  
*Award given to a small, selected number of students in the master's program at Harvard for their excellent Master's thesis proposal. Covers around 30% of the second year's master tuition.*
- **Nova 111 Student List 2022 Spain** May 2022  
*I was selected as one of the top 11 best students from Spain in Computer Science aged between 18-25*
- **Excellence in the University Entrance Exam (top < 1%)** July 2018  
*Award given by the Catalan president himself*
- **Bronze Medal Spanish National Physics Olympiad 2018** June 2018
- **City of Reus High School Academic Excellence Award** September 2016  
*Price given to the best student of each high school by the mayor*

## TEACHING EXPERIENCE

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- **École Polytechnique Fédérale de Lausanne, EPFL** Lausanne, Switzerland  
*Teaching Assistant in Computer Architecture* Sept. 2020 – Jan. 2021
  - Lead a team of a dozen highly skilled graduate students. I owned the major project of the course, programming the Game of Life by John Horton Conway in assembly code.
- **École Polytechnique Fédérale de Lausanne, EPFL** Lausanne, Switzerland  
*Teaching Assistant in General Physics I: Mechanics* Sept. 2019 - Dec. 2019
  - Weekly meetings with a group of 20-40 students, I assisted reviewing lectures and helping students out with problem sets.

## INDUSTRY EXPERIENCE

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- **Amazon** Barcelona, Spain  
*Software Engineering Intern* May 2020 - September 2020
  - **Amazon Search, Science and AI:** Developed browser plugin tool using Angular JS to help ML engineers debug the Amazon ranking algorithm. Tool used by more than 100 times per day by more than 20 engineers.

## LEADERSHIP EXPERIENCE

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- **Quiz.Fit** Lausanne, Switzerland  
*Co-founder and main developer* June 2019 – January 2021
  - Developed a mobile application in Swift for improving users' health through gamification of healthy habits. Convinced early investor, a professional in health insurance.

## OUTREACH AND SERVICE

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- **MIT Robotics Seminar Student Volunteer (Fall 2023)**  
*I am the student co-host of the MIT Robotics Seminar, which gives me the great pleasure of meeting and touring the invited Professors around MIT as well as organizing the related activities for the speaker throughout the day (student roundtables, student lunch, meeting with MIT Professors, preparing the speaker's slides).*
  - Hosted professors: Prof. Chelsea Finn (Stanford University), Prof. Nima Fazeli (University of Michigan), Prof. Cynthia Yu (University of Pennsylvania), Prof. Yu Sun (University of Toronto)
- **Volunteering for Chromosomal Disorders**  
*I am particularly concerned about chromosomal disorders. I have participated in multiple events to raise awareness, collect money for research, and better integration of these individuals into society.*
  - **Regatta Carla for the RETT syndrome 2018**  
Helped with the social media and promotion of a sailing regatta to raise funds for research on the RETT syndrome.
  - **Nastic Genuine 2018**  
Volunteered in the organization of a Spanish National football tournament for people with Down syndrome.
  - **La Marato de TV3 2012-2018**  
On multiple occasions, I performed in music, both playing the baroque guitar and singing, to collect money for multiple causes, one of which was collecting money towards research on chromosomal disorders.

- **Mentorship for students 2018 - Present**

*Other things I care about is helping students from Spain achieve their maximal academic potential, mentor students to get into top programs in Europe and the US, and mentor them on career path.*

- **Google Developer Student Club of Lausanne November 2022**

Gave a talk explaining my experience during my internship at Microsoft and the whole process of job finding in the United States.

## OTHER ACTIVITIES

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- **Running**

Cambridge, MA

2022 - Present

*I started running seriously in November 2022, and it has become a big part of my weekly routine to train my mind and body.*

- **Cambridge Half-Marathon 2023**

November 5th 2023

- **Cape Cod Marathon 2023**

October 8th 2023

I ran my first full Marathon in Falmouth, Cape Cod, MA. I completed it in 4 hours 33 minutes, and I am really excited to improve my time in the near future.

- **Nice Ironman 70.3 2023**

June 26th 2023

I ran a half-ironman in the city of Nice. This is one of the toughest triathlon races there are, consisting in a total of 70.3 miles between swimming, biking and running, and I completed it in under 6hours 43 minutes.

- **Boston Half Marathon 2022**

November 13th 2022

The BBA, Boston Half Marathon was my first running race ever. I am proud of my performance having ran it in 1 hour 42 minutes.

- **Sailing**

Salou, Spain

2008 - 2018

- **Windsurf World Championship 2017 & 2018**

I competed at the highest level in windsurfing for three years. I was sailing in the Raceboard modality; this is a longer table for upwind and downwind sailing.

- **29er National Championship 2015 & 2016**

I competed at international level in 29er sailboat. This is a two-handed sailboat, considered one of the toughest boats to sail because of its instability.

- **Optimist Catalan Championship 2010 – 2014**

I competed at regional level in the optimist sailboat. This is a single-handed sailboat for kids up to the age of 16. This modality gets very competitive, and I participated at the international regatta of Riva del Garda, Italy, with up more than 1000 participants.

- **Undergraduate Music degree**

Vila-seca, Spain

2008 - 2018

*Conservatory of music*

Music used to be a very big part of my life, I did 10 years of music degree, which used to take from three to five afternoons per week depending on the semester. I specialized in Baroque Guitar and the Lute and learned from an internationally known musician in the field, William Waters. I played in Chamber Music accompanied by both voice and other string instruments, guitars, and violins.

## SKILLS

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- **Languages**

- **Catalan** - *mother tongue*
- **Spanish** - *mother tongue*.
- **English** - *professional proficiency*
- **French** - *professional proficiency*
- **German** - *beginner*

- **Programming Languages**

- *Python, Javascript, C, C++, Scala, Spark, Kotlin SQL, HTML, CUDA, VHDL, MIPS assembly*
- *ML libraries: Pytorch, JAX, TensorFlow, Pytorch Lightning, Weights and Biases*
- *Robotics Simulators: Mujoco, Pybullet, Drake*