



## contact

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## languages

Spanish (native)  
 French (native)  
 Catalan (native)  
 English (C1, fluent)

## programming languages

Python, C, C++, Java,  
 JavaScript, YAML, R,  
 Bash/Zsh

## machine learning

WandB, PyTorch (+  
 Lightning), Sklearn,  
 Tensorflow, Pandas,  
 Pillow, OpenCV

## back-end

Django, PostgreSQL,  
 REST APIs

## cloud based technologies

AWS, Docker, Firebase

## music

Piano, Ableton

## profile

Currently pursuing a master's in **Sound and Music Computing** at Universitat Pompeu Fabra, I bring a solid foundation in **machine learning** and **computer vision** from my previous role at Silt, a digital identification startup. I hold a degree in **Computer Science** from the Polytechnic University of Catalonia (UPC), with a specialization in Artificial Intelligence and algorithms. I have a mix of solid academic training and practical experience, and I enjoy working with others to take on challenging, creative problems.

## education

### Master's degree in Sound and Music Computing

@ Universitat Pompeu Fabra (UPF)

2024–Pres  
 Barcelona

### Bachelor's degree in Computer Science

@ Universitat Politècnica de Catalunya (UPC)

2018–2022  
 Barcelona

- Specialization in Computation (AI, algorithms, data science and logic)

## experience

### AI Specialist in Computer Vision

@ Silt

Oct-Oct 2022-24  
 Barcelona, Remote

- Engineered neural networks using convolutional layers and known backbones with PyTorch and monitored their performances with WandB.
- Developed ML models for multiple identity documents (national IDs, passports, driving licenses, etc.), selfie, and selfie video recognition.
- Generated multiple synthetics datasets (MRZ images, IDs and MRZs with organic overlays, etc.) for data augmentation.
- Improved the accuracy of previous anti-spoof models by developing an image recapture detector using the aforementioned datasets, while also expanding the spoof categories.
- Performed multiple back-end and MLOps tasks, such as integrating ML/LLM models with the back-end infrastructure and optimizing the company's ML lifecycle.

### Full-Stack Developer

@ Discoverfy - SaaS Company

Feb-July 2022  
 Barcelona

- Designed and developed brand new front-end and back-end features following Agile and Scrum methodologies.
- Troubleshooted API data, UI, and UX inconsistencies using PostgreSQL, Node.js & React.
- Integrated Shopify installation methods to run the product on the Shopify platform.
- Implemented a new interface for the product's landing page.

### 3D Printing Instructor

@ Sitges PC

June-Dec 2018  
 Sitges, Barcelona

### Certified LEGO Robotics Instructor

@ Temps de lleure

Sep-Jun 2017-18  
 St. Pere de Ribes, Barcelona

## projects

### Weathered Chaos

Mar 2025

- Music conditioned by the current weather and double pendulums using RAVE and MIDI.

### Liquiprism

Dec 2024

- Implemented the LiquiPrism paper and developed an immersive visualizer and sonifier.

### Cybervulnerability Exploitability Classifier

Feb-June 2022

- Trained various machine learning models with gathered CVE data to predict the potential exploitability of cybervulnerabilities

### Voice-Sex Recognition Classifier

Feb 2019

- Found patterns given various voice features to recognize the sex of the speaker using neural networks and other machine learning models.