

# Edouard Lacroix

Lausanne, Switzerland | edoulacroix@gmail.com | +33 7 81 06 39 26 |  edoulaX

## Education

**Master in Computer Science, EPFL** (Switzerland) 2023 - 2025

**Minor in Financial Engineering**

- Focused on Agent Systems, NLP, Machine and Reinforcement Learning
- Minor Focused on Investment & Stochastic Processes

**Bachelor in Computer Science, EPFL** (Switzerland) 2019 - 2023

- Focused on Algorithms, Data Structures, and Theoretical Computer Science

**French Scientific Baccalaureate, LFB** (Spain) 2019

- Highest distinction

## Schools

*Middle, La Salle Passy Buzenval* (France) 2012 - 2018

*Elementary, franco-argentine Jean Mermoz* (Argentina) 2007 - 2012

*French School of Prague* (Czech Republic) 2003 - 2007

## Experience

**Master Thesis, EPFL, STMicroelectronics** (Italy) 2025

*An Agent System Approach to Silicon Wafer Defect Map Classification Using ViT*

- Conducted a state-of-the-art literature review on agent system components (perception, cognition, memory, tools, communication, learning)
- Applied Vision Transformers (ViT) for defect map classification

**Student Organization, EPFL** (Switzerland)

*Co-Founder of La Miellerie (music production organization at EPFL-UNIL)* 2023 - 2025

- Managed sponsorship, marketing, and event teams
- Organized concerts for audiences of 100+ attendees

*IT Officer for the Entrepreneur Club of EPFL-UNIL* 2023

- Implemented process automation and maintained the organization's website

## Selected Projects

**Interactive World Map of Spotify Charts:**

- Built an interactive web visualization of global Spotify charts by country, genre, and artist, including a timeline of trends

**Reinforcement Learning Actor for Wind Turbine Blade Pitch Control (EPFL UNFoLD Lab):**

- Developed a simulated environment and trained an actor-critic agent for optimal blade pitch control

**Multi-Factor Equity Portfolio Strategy:**

- Designed a portfolio integrating multiple factors to enhance risk-adjusted returns

## Skills

Languages	Python, Scala, Java, Kotlin, C, Assembly, SQL, VHDL
Frameworks	Pytorch, Spark, Tensorflow, Numpy, Transformers, Scikit-learn, Pandas
Tools	Git (GitHub, GitLab), Docker, Dataiku, Jupyter Notebooks, Notion, LaTeX, Typst

## Interests

- **Music** (production, live performances incl. HEC Graduation 2023) • **Sports** (Tennis: FFT 15/1 & interclub competition; Football: international tournaments; Ski: Flèche d'Or) • **3D** (Spline, Blender)

## Languages

- **French** (native) • **English** (C1, professional proficiency) • **Spanish** (C1, fluent) • **Italian** (A2, basic)