Edouard Lacroix

Paris, France | 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 Learning, and Reinforcement Learning
- Minor focused on Investment and 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*
- Graduated with highest distinction

Schools
  Middle School, La Salle Passy Buzenval (France)   *2012 – 2018*
  Elementary School, Franco-Argentine Jean Mermoz (Argentina)   *2007 – 2012*
  French School of Prague (Czech Republic)   *2003 – 2007*

Experience

Master Thesis, *EPFL* • *STMicroelectronics* (Italy)   *2025*
  An Agent-Based 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 Organizations, *EPFL* • *UNIL* (Switzerland)

  Co-Founder of La Miellerie (music production organization) 🔗   *2023 – 2025*
  - *Managed sponsorship, marketing, and event teams*
  - *Organized concerts for audiences of 100+ attendees*

  IT Officer of The Entrepreneur Club 🔗   *2023*
  - *Implemented process automation and maintained the organization's website*

Selected Projects

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

Interactive World Map of Spotify Charts
- Built an interactive world map visualization of global Spotify charts by country, genre, and artist, including a timeline of trends

Multi-Factor Equity Portfolio Strategy
- Designed a portfolio integrating multiple factors to enhance risk-adjusted returns

Oil Futures Pricing & Storage Modeling
- Developed numerical models to price oil futures and storage options, implementing simulation and optimization routines for valuation under different market scenarios.

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: HEC Graduation 2023 with 1000+ attendees & Concerts) • **Sports** (Tennis: *FFT 15/1 & interclub competition & official referee*; Football: *international tournaments*; Ski: *Flèche d'Or award*) • **3D Design** (Spline, Blender)

Languages

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