Antonin PERONNET

Age: 22

Contact

https://rambip.github.io
rambip/
antonin-peronnet-a5496a242
+33 6 73 74 11 08

antonin.peronnet@telecom-paris.fr

Skills

- **Programming Languages**: Rust (tooling & macros), Python, C. HTML, JS, CSS
- **Machine Learning**: scikit-learn, spaCy, nltk, PyTorch
- **AI tools**: ollama, langchain, MCP
- **Visualisation Libraries**: Pandas, Vega Altair, Plotly
- **Tools**: SSH, Git, Linux, Docker, Typst, LaTeX

Languages

- **French** - Native
- **English** - Advanced (C1)
- **German** - Intermediate (B1)

Interests

- information theory
- open source software
- complex data visualization
- writing poems
- improvisational theater
- juggling

Education

- **2023 → 2025** — **Institut Polytechnique de Paris - Télécom Paris.**
  M.Sc. (Computer Science)

  Top 5 France's best engineering school, specialized in digital and AI, with majors:

  1. ***Machine learning***. Information theory, Deep learning (**torch**), NLP (**sk-learn**), image analysis, graph learning (**GNN**).
  2. ***Human-Computer Interaction***. Data visualization (**vega**, **D3**), web technologies (**HTML**, **JS**, **CSS**), 3d rendering and simulations (**C++**).

- **2021 → 2023** — **Lycée Descartes, Tours**
  B.Sc. (Engineering) — Preparatory Classes for Engineering Schools (MPI)

  Computer Science: Machine Learning, Algorithm Design Patterns (**OCaml** & **C**, **SQL**), Formal Logic, Computability
  Maths: Algebra, Calculus & Analysis, Probability & Statistics

  50th place at Nation-wide contest ("Concours des Mines")

Projects

- **05/2025 → 06/2025** — **Sketch vectorization**
  Implemented a SOTA paper for sketch to SVG conversion (team work). Used a custom CNN ResNet to rasterize the image, 2D curve fitting and Metropolis-Hasting optimization algorithm.

- **09/2024 → 06/2025** — **Modeling the graph of French Law**
  One-year research project, supervised by Nils Holzenberger. Created a new unsupervised method for entity recognition in legal documents, using recursive syntaxical trees. Conceived a new benchmark for this task.

- **01/2025 → 02/2025** — **Procedural geometry generation of plants**
  Engineered an efficient 3D plant mesh generation pipeline (**Bevy** lib, **Rust**). Used particle-based collision detection and spline interpolation for nodes + Delaunay triangulation.

- **02/2024 → 06/2024** — **Temporal graph exploration project**
  Designed interactive tools to analyze evolving networks in Python (**Dash**) Implementation of filtering and layout algorithms in Rust, enabling a +300 students dataset to load instantaneously.

Professional and associative experience

- **09/2024 → present** — **President of P.I.A.F**
  Association *Pour une Intelligence Artificielle Fiable*

  Founded and led a weekly AI safety reading group.
  Coordinated 15 meetings exploring watermarking, unlearning, explainability, scalable oversight and more.

- **10/2024 → present** — **Series of conferences: ASIMOV**
  Vice-president of student association *Teletalks*.

  Organized 4 conferences on digital risks with AI research, regulation and ethics experts. Designed promotional materials (**Inkscape**, **Canva**), logos and built interactive website (**Flask**).

- **06/2024 → 07/2024** — **Human formation internship**
  One-month German farm internship at Biolandhof Hillesheimer
  Participated in horse-powered harvesting, managed stable maintenance, and organized garden operations.