Victor Lemaître

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Education

Paris Dauphine university — Paris,France

- *First year of Master in Computer Science and Mathematics (Master I2D)* — *Aug. 2024 – now*
  Expected graduation date for the second year of my Master's program is may 2026

Paris Dauphine university — Paris, France

- *BSc Computer Science and Mathematics; Passed with honors* — *Aug. 2022 – July 2024*
  (ranked 14th out of 201 in the first year and 10th out of 39 in the second)

Uppsala university — Uppsala, Sweden

- *Exchange program in Computer Science and Mathematics; Passed 4 out of 6 classes with highest honors* — *Aug. 2023 – Jan. 2024*

Additional Education

AI safety Sweden, AI safety fundamentals — Uppsala, Sweden

- *Participated in weekly debate over topics in technical Ai safety research. Had to conduct a research distillation project and chose shard theory.* — *Sept. 2023 - Jan. 2024*

Andrej Karpathy, Neural Networks: Zero to Hero

- *13 hours of youtube videos giving in-depth explanations of pytorch's internals, backpropagation and transformer architecture. Reimplemented the multi-head attention layer from simple tensor operations. Used chain of thought to teach a small transformer the addition of two numbers* — *Feb. 2024 - April 2024*

Experience

Summer research internship — Paris Dauphine university, France

- *Improved the neural network behind AstraZeneca's retrosynthesis tool Aizynthfinder by generating large amount of synthetic data* — *May 2024 - Sept. 2024*
  - **Relevant skills**: TensorFlow, Numpy, Pandas

Personal project

- **Interpreting an MLP trained on modular addition** : Analyzed how a one-layer MLP computes modular addition using Fourier transforms. Used PyTorch hooks to investigate hidden layer activations and identified key frequency patterns used by neurons

Programming Skills

- **Languages** (From most to least proficient): Python, C, Haskell, Java, OCaml, SQL, R
- **Libraries & Frameworks**: Pytorch, Tensorflow, Numpy, Pandas, Matplotlib