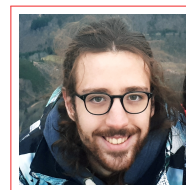


Eliot Tron

Curriculum vitae

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Scholarship

- 2018–2022 **École Normale Supérieure, Lyon**, Computer Science and Mathematics Departments.
- 2021 **École Normale Supérieure, Lyon**, Master in Mathematics.
- 2019 **École Normale Supérieure, Lyon**, Bachelor's Degree of Theoretical Computer Science.
- 2019 **UCBL, Lyon**, Bachelor's Degree of Mathematics.
- 2016–2018 **CPGE, Lycée Condorcet, Paris**, MPSI-MP*.
- 2016 **Baccalauréat Série S, Lycée Condorcet, Paris**, mention Très Bien.

Professional Experiences

- October 2022 - End of 2025 **PhD Candidate, ENAC, Toulouse**, Neural Network Robustness: a Riemannian Foliation Perspective, supervised by Nicolas Couellan, Rita Fioresi and Stéphane Puechmorel.
- 01 March 2022 - 30 June 2022 **Research Internship, Bologna University, Italy**, Deep Learning: Riemannian and subriemannian structures on the space of models and data manifolds, supervised by Rita Fioresi.
Keywords: Riemannian Geometry, Deep Learning, Information Geometry
- Beginning of 2022 **Journal paper, Pre-print article following my internship at ENAC**, Title: *E. Tron, S. Puechmorel, and N. Couellan. Canonical foliations of neural networks: application to robustness.* Available at <https://hal-enac.archives-ouvertes.fr/hal-03593479>, 2022..
- 06 September 2021 - 28 January 2022 **Research Internship, ENAC, Toulouse**, Neural Networks input Foliations and Adversarial Attacks, supervised by Nicolas Couellan and Stéphane Puechmorel.
Keywords: Riemannian Geometry, Machine Learning, Adversarial attacks, Information Geometry
- 29 March 2021 - 18 July 2020 **Research Internship, Thales Research & Technology, Palaiseau**, Solving Partial Differential Equations with Equivariant Neural Network, supervised by Pierre-Yves Lagrave.
Keywords: Differential Geometry, Convolutional Neural Network, Equivariance, Information Geometry
- 20 April 2020 - 17 July 2020 **Research Internship, NII in Tokyo (remote)**, Machine Learning and Information Geometry: a link with Topological Data Analysis, supervised by Mahito Sugiyama.
Keywords: Information Geometry, Topological Data Analysis, Sufficient Statistic, Machine Learning

6 June 2019 – **Research Internship**, *DANTE team, IXXI, LIP, ENS de Lyon*, Featured network
13 July 2019 embedding using GCN Variational Autoencoders, supervised by Márton Karsai and
Sébastien Lérique.
Keywords: Machine Learning, Data Science

Teaching

2022-2023 **Measure Theory**, *ENAC, Toulouse*, 17h lecture for L3 students.
Statistics, *ENAC, Toulouse*, 30h lecture for L3 students.
2021-2022 **Measure Theory**, *ENAC, Toulouse*, 17h lecture for L3 students.

Languages

English C1 level *Cambridge Advance English (CAE)*
German A2 level
Italian A1 level

Computer skills

Python Good level C/C++ Intermediate level
Bash Good level OCaml Intermediate level
L^AT_EX Good level Coq Basic level
html/CS Basic level

Interests

Music Drummer, Electronic Music, Sound-engineering
Sport Climbing, Snowboarding, Biking, Hiking
Other Cooking, Movies