

Kevin Tran

PhD Student in Computer Science

41 rue de Tolbiac

75013 Paris

✉ Kevin.Tran[at]lip6.fr

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Education

- 2023 – 2026 **PhD Student in Computer Science**, *Sorbonne Université*, LIP6, Supervised by Jérémy Berthomieu and Romain Lebreton
Subject : Structured linear algebra for recurrences and Gröbner bases.
- 2022 – 2023 **Master Parisien de Recherche en Informatique**, *Université Paris Cité*
Courses : Computer Algebra, Cryptography, Combinatorics.
- 2021 – 2022 **Master Mathématiques de l'information, cryptographie**, *Université Rennes 1*
Courses : Computer Algebra, Coding Theory, Cryptography.
- 2020 – 2021 **Magistère de Mathématiques**, *Université Paris-Saclay*
- 2019 – 2020 **Double Licence Mathématiques Informatique**, *Université Paris-Saclay*
- 2018 – 2019 **Licence Portail MPI**, *Université Paris-sud*

Work Experience

- March 2023 – August 2023 **Graduation internship**, *LIP6*, Supervised by Vincent Neiger and Mohab Safey El Din, 6 months
Algorithmics on structured matrices for the xgcd computation.
- May 2022 – July 2022 **M1 Internship**, *LIP6*, Supervised by Vincent Neiger and Mohab Safey El Din, 2 months
Implementation of the subroutines Basis, M-Basis and PM-Basis for the computation of Block Wiedemann.
- June 2021 – July 2021 **L3 Internship**, *Sorbonne université*, Supervised by Sabine and Guillaume Rousseau, 1 month
Definition of SIR models and implementation of optimisation and machine learning methods on Python. Comparison of the model with virological data.
- 2019 – 2020 **Tutor**, *Université Paris-Saclay*, Service informatique et formation, 1 an
Train first-time students in the IT tools offered by the university. Help in mathematics, computing or physics

Various Experience

- February 2022 – May 2022 **Projet Tutoré (M1)**, Supervised by Delphine Boucher, 4 months
Study of the HFE encryption system proposed by J.Patarin and attack with Gröbner bases proposed by J-C.Faugère. Implementation of an HFE model, F4 and FGLM algorithms on SageMath
- February 2021 – May 2021 **Supervised research work (L3)**, Supervised by Michel Rumin, 4 months
Find the relationship between the number of peaks, lakes and passes on an island (link with Euler's characteristic). This work was based on tools of differential calculus, topology and holomorphic function

Computer skills

Languages C/C++ (Flint, NTL, PML), Python (NumPy, Matplotlib, Scikit-Learn), Java, SageMath

Other LaTeX, GitHub/GitLab, Emacs

Languages

French Mother tongue

English B2 Level

Italian Notions

Leisure

Sports Running, Swimming

Culture Chess, Music, Literature.