Kevin Tran

PhD Student in Computer Science

41 rue de Tolbiac
75013 Paris
Kevin[dot]Tran[at]lip6[dot]fr
ktran11

Education

2023 – 2026 **PhD Student in Computer Science**, *Sorbonne Université*, LIP6, Supervised by Jérémy Berthomieu
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.