

## CV (Year 2022-2023)

Pierre PÉBEREAU    **PhD Student at Sorbonne Université / Thales**  
Born 12/11/1999

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### Education

#### **December 2022 - Sorbonne Université, LIP6 / Thales**

PhD Student under the supervision of [Mohab Safey el Din](#) and Simon Abelard.

**Construction and Cryptanalysis of Post-Quantum Signature Schemes.**

#### **2021-2022 : Université Paris-Diderot**

Master Parisien de Recherche en Informatique (**M2 MPRI/AFP**), specialized in Combinatorics, Computer Algebra, Cryptography and Algorithmics.

#### **2019-2022 : Télécom Paris, cursus Paris,**

Options :

- MITRO : Mathematics, Theoretical Computer Science, Operational Research
- ACCQ : Algebra, Cryptography, Encryption, Quantum Information
- SD : Data Science

**2020** : Stanford Coursera MOOC on Machine Learning by Andrew Ng ([certificate link](#))

#### **2017-2019 : Lycée Janson-de-Sailly**

Classe préparatoire MPSI-MP\*, specialized in Computer Science

Enrolled at Télécom Paris on the national exam “Concours Commun Mines-Ponts”

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### Professional Experience

**04/2022-08/2022** : M2 Intern at **Thales** cryptology lab LCH supervised by Eric Sageloli (Thales) and Pierrick Meaux (University of Luxembourg). **Identity-based signature schemes with tight security from lattices.**

**06/2021-08/2021** : M1 Intern at **INRIA** project-team [COATI](#) supervised by David Coudert and Nicolas Nisse. **Exact computation of pathlength by branch and bound** ([link](#) in French)

**2020-2022** : [Khôlleur](#) in mathematics at Lycée Janson-de-Sailly for MPSI students. This consist in giving oral interrogations on specific subjects for “classe préparatoire” students each week.

**2018-2019** : Tutoring for highschool students in mathematics and physics at École Alsacienne.

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## Associations

**2019-2021** : Technical Manager for association [Aurore](#).

Aurore is an association providing internet access, ran benevolently by students of Université Paris-Saclay and surrounding engineering schools. I took part in deploying our network to a new residence in a contract for CROUS Versailles.

**From 2020** : Administrator of **Télécode**, competitive programming club of Télécom Paris. We breathed life to a long deceased club which aims to prepare ourselves and fellow students for a set of different programming contests such as ICPC. In 2021, we organized an [operations research contest](#) in partnership with Total.

**2020** : Administrator of **Rezel** : Rezel is a student association of Télécom Paris which provides a range of online services, such as website hosting and jitsi, for students.

**2019-2020** : **Forum Telecom Paris** : Development of the [website](#)

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## Projects

**2019-2021** : I took part in several programming contests with fellow Telecom Paris students: Hashcode, Hackathon Renault hosted by [KIRO](#), BattleDev, and many in-house contests.

**2018-2019** : My TIPE in classe préparatoire was focused on ElGamal Encryption and the Discrete Logarithm Problem, over Finite Field and Elliptic Curves, with a comparison to the RSA scheme.

**2020** : My end of year project in my first year at Télécom Paris was implementing **Weisfeiler-Lehman Graph Kernels** in the Python package scikit-network under the supervision of Thomas Bonald. It was written in Cython for speed purposes. The source code has been merged to scikit-network and can be found [here](#). Our implementation was competitive with state-of-the-art implementations of this kernel.

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## Languages

- English (C1), (IELTS band 8)
- Spanish(B1)
  
- Python/Cython/Sage                      - Java                      - C/C++                      - Bash
- OCaml    - SQL                      - Octave