Quentin Guilmant

Born on August 11th, 1995, french nationality

Current situation

October 2022 – Today	**Postdoctoral researcher**, *Max Plank Institute for Software Systems*, Saarbrücken, Germany, supervised by Joël Ouaknine. Linear dynamical systems, Weighted timed games

Experience

Previous positions

September 2019 – September 2022	**Doctoral student, contrat doctoral spécifique normalien (CDSN)**, *École Polytechnique*, supervised by Olivier Bournez, Palaiseau. Thesis title : Computations with the generalized real line

Teaching

September 2019 – September 2022	**Teaching assistant for introduction to programming technics**, *École Polytechnique*, Palaiseau. Supervising exercise session for first year student at École Polytechnique. The programming in use is Java. This course aims to teach student about how programs work (memory structure, code organisation, objects, data structures, etc...), standard algorithms (sorting, paths in graphs, etc...) and usual programming technics (inductions, objects and classes, etc...).
September 2019 – September 2022	**Teaching assistant for Bachelor student in the Formal Languages Course**, *École Polytechnique*, Palaiseau. Supervising exercise sessions for Bachelor students at École Polytechnique. The course is about formal languages, rational languages, grammars at general theorems about them.
September 2019 – September 2022	**Tutoring for the Foundings of Computer sciences course**, *École Polytechnique*, Palaiseau. Helping students from École Polytechnique who have difficulties with the basics of Logic, Computation Theory (automata, Turing machines etc...) and Complexity Theory

Internships

2019 **Computations with the generalised real line**, *LIX, École Polytechnique supervised by Olivier Bournez*, Palaiseau.
A one-semester long intership. Works about computations on surreal fields

2017 **Matrix rigidity, jenga hyper-graphs and efficient PIR schemes**, *CWI, Université d'Amsterdam, supervised by Jop Briet*, Amsterdam, Netherlands.
An 11 weeks long internship. Work on relations between some classes of matrices and some hypergraphs to apply to PIR protocols.

2016 **Continuous time computations models. Complexity classes characterised with PODEs**, *LIX, Ecole Polytechnique supervised by Olivier Bournez*, Palaiseau.
A 6 weeks long intership. Works on GPACs and refinement of the polynomial complexity class in the context of this computation model.

Miscellaneous

2019-2022 **Solutions to competitive exams**, *Éditions H&K*.
Composition of solutions to the competitive exam from the french Great Schools Mines, X-ENS et CCP in MP, PC and PSI sections.

2018 **Oral examiner**, *Lycée aux Lazaristes*, Lyon.
Khôlles for first year student in MPSI section

2017 **Rédaction de corrigés**, *Éditions H&K*.
Composition of solutions to the competitive exam from the french Great School Centrale in PC section

Diplomas

2019 **Master Fundamental Computer Science**, *ENS Lyon*, Lyon.
average grade : 15.78/20

2016 **Bachelor of Mathematics**, *Université Claude Bernard Lyon 1*, Lyon.

2016 **Bachelor Fundamental Computer Science**, *ENS Lyon*, Lyon.

2013 **Baccalauréat, Scientific section**, *Lycée Chevreul*, Lyon.

Competitive exams

2018 **Agrégation de Mathématiques**, *ENS Lyon*, Lyon.
Option D (Computer Sience), ranked 30th

2015 **Concours des Ecoles Normales Supérieures**, *Lycée Aux Lazaristes*, Lyon.
Ranked 34th for ENS Lyon

Training path

2018–2019 **Master degree - second year, Fundamental Computer Science**, *ENS Lyon*, Lyon, Master.

2017–2018   **Preparation for the Agrégation de Mathématiques**, *ENS Lyon*, Lyon, ranked 30th.
option D (Computer Science)

2016–2017   **Master degree - first year, Fundamental Computer Science**, *ENS Lyon*, Lyon.

2015–2016   **Bachelor degree - third year, Fundamental Computer Science**, *ENS Lyon*, Lyon, Bachelor.

2015–2016   **Bachelor degree - third year, Mathematics**, *Université Claude Bernard Lyon 1*, Lyon, Bachelor.

2014–2015   **Classe Préparatoire MP* - equivalent ot second year of Bachelor**, *Lycée Aux Lazaristes*, Lyon.
option Computer Science, ranked 34th/301 for ENS de Lyon

2013–2014   **Classe Préparatoire MPSI - equivalent ot first year of Bachelor**, *Lycée Aux Lazaristes*, Lyon.
option computer science

2013   **Baccalauréat**, *Lycée Chevreul*, Lyon.
Scientific section, option Mathematics

Some courses I followed

2018-2019   **Logic Automatas and Games - Combinatorial topology - Semantic and Verification - Approximation theory - Lower bounds methods**, *ENS Lyon*, Denis Kuperberg - Matteo Mio - Fréderic Meunier et Matěj Stehlík - Colin Riba et Pierre Clairambault - Nicolas Brisebarre et Damien Pous - Yves Robert - Damien Sthélé - Pascal Koiran, Omar Fawzi and Stéphane Thomassé.

2016–2017   **Computer Algebra - Computational Complexity - Information Theory**, *École Normale Supérieure de Lyon*.

2015–2016   **Physics, information and computing**, *École Normale Supérieure de Lyon*, Pascal Degiovanni - Natacha Portier.

Informatics skills

Basics   HTML, CSS, PHP
Advanced   LaTeX, Linux/administration système, Python, Caml, C/C++

Languages

French   **Native**
English   **Advanced**   *Certified B2 «CLES»*
German   **Notions**