

PhD in theoretical computer science, looking for a software engineer position

Education

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| PhD in Theoretical Computer Science | Université Paris 13 | 2019–2023 |
| Master Parisien de Recherche en Informatique (MPRI) | Université Paris 7 | 2018–2019 |
| Master 1 Informatique Recherche (mark 15.5/20) | Université Paris 7 | 2017–2018 |
| Licence Informatique (ranked 2nd, then 1st) | Université Paris 7 | 2016–2017 |
| DUT Informatique (ranked 1st) | IUT de Montreuil | 2014–2016 |

Experience

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| Université Paris 13 – Institut Galilée | 2022–2023 |
| Fellowship for research and teaching (ATER) | Villetaneuse |

192 hours of teaching in programming (C, Java, Prolog), formal logic, web (HTML/CSS) and networks.

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| Université Paris 13 (LIPN, LoVe team) | 2019–2023 |
| PhD thesis, supervised by Damiano Mazza and Thomas Seiller | Villetaneuse |

Title: “An exegesis of transcendental syntax”. Formalization and development of Girard’s informal transcendental syntax project. Definition of a new model of computation used as a basis for a non-primitive definition of (linear) logic’s proof-nets. Complete panorama of the links between logic and computation. Three years of teaching on programming (C, OCaml), formal logic and computability theory. Co-founded the ReFL (Réflexion sur les fondements de la logique) research group (mostly with other PhD students).

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| Université Paris 13 (LIPN, LoVe team) | March – August 2019 |
| Internship, supervised by Thomas Seiller | Villetaneuse |

Report on the origin and motivation of Jean-Yves Girard’s transcendental syntax from his geometry of interaction project. First formalization of informal ideas sketched in Girard’s papers.

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| Université Paris 13 (LIPN, LoVe team) | February – July 2018 |
| Master research project, supervised by Damiano Mazza | Villetaneuse |

Use of tools from implicit complexity to investigate the space complexity of functional programs. Study of the lambda-calculus as a reasonable cost model (relatively close to Turing machine’s complexity).

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| Université Paris 7 (IRIF) | June 2017 (8 weeks) |
| Internship, supervised by Delia Kesner and Michele Pagani | Paris |

Encoding of the PCF language (Turing-complete extension of lambda-calculus) into linear logic’s proof-nets extended with explicit substitutions. Link of the two models with a simulation proof.

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| Inria de Paris (PROSECCO team) | April 2016 (12 weeks) |
| Internship, supervised by Yannis Juglaret | Villetaneuse |

Use of the Coq proof assistant for the verification of theorems in a paper on secure compilation. Implementation of an abstract machine and a compiler from a C-like language to an assembly-like language.

Technical skills

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| Programming OCaml, Haskell, Coq, Java, C/C++, Python | Web HTML, CSS, Jekyll, Hugo |
| Project management Git, Make | Typesetting LaTeX, Typst |

Languages

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| French Mother tongue | English Professional proficiency |
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Hobbies and interests

Computer music, philosophy and foundations of logic, finance