

# Jonas Sénizergues

Computer Scientist

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🌐 <https://jsenizer.github.io/>



## Research interests

Graph theory  
Graph algorithms  
Distributed algorithms

Autostabilization  
Byzantine fault tolerance  
Game theory

## Employment

2023-2024 **Teaching Assistant**, Université de Bordeaux  
2021-2022 **Teaching Assistant**, ENSIE  
2018-2021 **PhD student**, Université Paris-Saclay  
2016-2017 **Math Teacher in highschool**, Bondoufle

## Diplomas

2022 **PhD**, Computer Science, Université Paris-Saclay  
2015 **ENS diploma**, ENS Cachan  
2014 **Agrégation de Mathématiques**, (a prestigious mathematics competitive exam in France)  
2013 **Master**, Computer Science, MPRI  
2011 **Licence**, Computer Science, ENS Cachan

## Curriculum

2018-2022 **PhD**, LISN, Université Paris-Saclay, Orsay  
2014-2015 **Master BIBS (as auditor)**, Université Paris-Sud, Orsay  
2013-2014 **Training for the Agrégation de Mathématiques competitive exam**, ENS Cachan, Cachan  
2011-2013 **Master in Computer Science**, MPRI, Paris  
2010-2013 **Computer Science**, ENS Cachan, Cachan  
2008-2010 **CPGE**, Lycée Michel Montaigne, Bordeaux

## Languages

French Native speaker  
English Fluent  
Spanish B1  
Japanese A2

## Programming languages

○ ssr-Coq  
○ OCaml  
○ Python  
○ Java

## Publications and Preprints

- 2023 **Making Self-Stabilizing Algorithms for any Locally Greedy Problem**, *Johanne Cohen, Laurence Pilard, Mikaël Rabie and Jonas S  nizergues*, SAND 2023
- 2021 **Self-Stabilization and Byzantine Tolerance for Maximal Independent Set**, *Johanne Cohen, Laurence Pilard and Jonas S  nizergues*, SSS 2021
- 2014 **Formalization of Shannon’s Theorems**, *Reynald Affeldt, Manabu Hagiwara, and Jonas S  nizergues*, JAR 2014
- preprint **A unified convention for achievement positional games**, *Florian Galliot, Jonas S  nizergues*, Submitted to EUROCOMB2025 , <https://hal.science/hal-05002388/>
- preprint<sup>1</sup> **Minimum Colored Maximum Matchings in vertex-colored Graphs**, *Johanne Cohen, Yannis Manoussakis and Jonas S  nizergues*, Submitted to DMTCS, <https://hal.science/hal-02157745/>
- preprint<sup>1</sup> **Self-Stabilization and Byzantine Tolerance for Maximal Independent Set (journal ver.)**, *Johanne Cohen, Laurence Pilard, Fran  ois Pirot and Jonas S  nizergues*, To be submitted, <https://arxiv.org/abs/2210.06116v3>
- preprint<sup>1</sup> **Autostabilizing Minimal Clique Decomposition with Byzantine Fault Tolerance**, *Johanne Cohen, Laurence Pilard and Jonas S  nizergues*, To be submitted, <https://hal.science/hal-04872001>

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<sup>1</sup>A version of these works are available in my PhD manuscript *Independent sets and beyond, through the prism of distributed systems and colored graphs*.