

Federico Badaloni

PhD Student

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Education

- 03/2023–present **PhD Student**, *Max Planck Institute for Security and Privacy*
Student in the Heinz Nixdorf Research Group for Cryptocurrencies and Smart Contracts
- 2013–2022 **Graduate Degree in Computer Science**, *Universidad Nacional de Rosario*
Thesis: Convergence Rate Of Alternating Fictitious Play. Download (in spanish) [here](#).

Publications

- 2025 Federico Badaloni, Sebastian Holler, Chrysoula Oikonomou, Pedro Moreno-Sanchez and Clara Schneidewind. Bitmlx: Secure cross-chain smart contracts for bitcoin-style cryptocurrencies. To appear in 38th IEEE Computer Security Foundations Symposium.
- 2025 Stephan Dübler, Federico Badaloni, Pedro Moreno-Sanchez, and Clara Schneidewind. Atomic transfer graphs: Secure-by-design protocols for heterogeneous blockchain ecosystems. To appear in 38th IEEE Computer Security Foundations Symposium.
- 2021 Ariel Arbiser and Federico Badaloni. Velocidad de convergencia de juego ficticio simultáneo y alternante. In Simposio Argentino de Informática Industrial e Investigación Operativa, 50^º Jornadas Argentinas de Informática.

Academic and Voluntary Service

- 2025 **Reviewer**, *IEEE International Conference on Blockchain and Cryptocurrency*
- 2025 **Teaching Assistant**, *Foundations of Programming Languages, Verification, and Security*, Ruhr-Universität Bochum
- 2025 **Master's Thesis Supervisor**, *Darius Hartlief*, Ruhr-Universität Bochum
- 2024 **Teaching Assistant**, *Functional Programming*, Ruhr-Universität Bochum
- 2024 **Bachelor's Thesis Supervisor**, *Minhua Liu*, Ruhr-Universität Bochum
- 2024 **Invited Talk**, *BitMLx: Secure Cross-chain Smart Contracts For Bitcoin-style Cryptocurrencies*, TU Wien

Industry Experience

- 2020–2022 **Software Engineer**, *ProfitWell*
- 2018–2020 **Software Developer (part-time)**, *CEDiR*