Mohamed Taki Eddine Abedesselam

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Education

University of Rome Tor Vergata, University of Camerino, Italy, PhD Student in Blockchain and Distributed Ledger Technologies — Jan 2024 – present

University of Batna 2, Algeria, Master Degree in Cryptography and Security — Sep 2021 – Jul 2023

University Mohamed Khider Biskra, Algeria, Bachelor Degree in Computer Science — Sep 2017 – Jul 2021

Languages

- Arabic **Mother tongue**
- English **Intermediate**
- French **Intermediate**

Programming Skills

C, C++, Python, Solidity, Java, JavaScript, HTML & CSS

Research Interests

- P2P networks
- Random Graphs
- Randomized Algorithms
- Distributed systems
- Distributed Ledger Technologies
- Cryptocurrency

Publications

1. Abedesselam, T. E., Giacomelli, F., and Pasquale, F., "Disassortative dynamic BA models inspired by the Bitcoin Lightning Network," in *2025 IEEE International Conference on Pervasive Computing and Communications Workshops and other Affiliated Events (PerCom Workshops)*, pp. 19–24, Mar. 2025. doi: 10.1109/PerComWorkshops65533.2025.00035

Preprints

1. Abedesselam, M. T. E., Giacomelli, F., and Pasquale, F., and Salvi M.,"Payment-failure times for random Lightning paths" . arXiv: 2511.16376[cs.NI]. URL: https://arxiv.org/abs/2511.16376

Talks

Payment-failure times for random Lightning paths.7th Conference on Blockchain Research & Applications for Innovative Networks and Services. — Zurich,CH Nov 2025

Workshops

National PhD Programme In Blockchain and Distributed Ledger Technology — Cagliari,IT, Jul 2025

Computational Aspects of Complex Networks — Rome,IT, Dec 2024

National PhD Programme In Blockchain and Distributed Ledger Technology — Palermo,IT, Jun 2024

Schools

CyberDI 2025 - Advanced Techniques in Digital Identity — Tropea,IT, Oct 2025