

Achraf Azize

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EDUCATION

PhD Candidate - Scool (Inria) - University of Lille

Lille, FR

Interests: Differential Privacy; Multi-armed bandits; Privacy auditing; Membership Inference Oct. 2021 – Nov. 2024

ENS Paris Saclay: Master's Degree MVA

Gif-Sur-Yvette, FR

Master of Research in Mathematics, Computer Vision and Machine Learning Sep. 2020 – Aug. 2021

Ecole Polytechnique: French Engineering School

Palaiseau, FR

Major in Applied Mathematics and Computer Science, Minor in Physics Aug. 2017 – Aug. 2021

Moulay Youssef: Preparatory Classes in Science

Rabat, MA

Undergraduate course in Sciences leading to the entrance to the French Grandes Écoles Sep. 2015 – May. 2017

PUBLICATIONS

1. **Achraf Azize** and Debabrota Basu. Some targets are harder to identify than others: Quantifying the target-dependent membership leakage. AISTATS 2025 (Oral).
2. **Achraf Azize** and Debabrota Basu. Open Problem: What is the complexity of joint differential privacy in linear contextual bandits? COLT 2024.
3. **Achraf Azize** and Debabrota Basu. Concentrated differential privacy for bandits. IEEE SaTML 2024.
4. **Achraf Azize**, Marc Jourdan, Aymen Al Marjani, and Debabrota Basu. On the complexity of differentially private best-arm identification with fixed confidence. NeurIPS 2023.
5. **Achraf Azize** and Debabrota Basu, Rényi differentially private bandits. PPAI@AAAI 2023.
6. **Achraf Azize** and Debabrota Basu. When privacy meets partial information: A refined analysis of differentially private bandits. NeurIPS 2022.

WORK EXPERIENCE

Post-doctoral Researcher

Jan. 2025 – Present

Inria FairPlay, CREST, ENSAE

Paris, FR

- Working with Vianney Perchet on online algorithms and competitive analysis.

Visiting Researcher

Sep. 2024 – Nov. 2024

Graduate School of Informatics, Kyoto University

Kyoto, JP

- Collaboration with Junya Honda on projects related to Multi-armed bandits and Differential Privacy.

Teaching Assistant

Oct. 2021 – Present

ENS Paris-Saclay, Ecole Centrale de Lille

Lille, FR

- Graphs in Machine Learning, ENS Paris-Saclay (MVA Masters), 2021-2022, 2022-2023, 2023-2024 and 2024-2025, with Daniele Calandriello. Course [link](#).
- Python Practicals, Ecole Centrale de Lille (SDIA Masters), 2022-2023. Course [link](#).

Research Intern

Apr. 2021 – Sep. 2021

InstaDeep

Paris, FR

- Multi-Object Manipulation using Relational Reinforcement Learning and Graph Attention Networks
- Achieved zero-shot generalization by successfully controlling a simulated robot's arm to stack objects into a previously unseen number of blocks and configurations

Report available [here](#)

AWARDS AND HONORS

French Government Major-Excellence Scholarship 2017-2021 (Top seven in Morocco)

Member of the Moroccan Mathematics Olympiad Team (Top 12)

Ranked 2nd out of 1779 candidates in the Concours National Commun 2017 ([CNC](#))