Curriculum Vitae

Personal Details

Full Name Saar Cohen
E-mail saar30@gmail.com
Website https://saarcohen30.github.io/
Year of Birth 1997 (Israel)

Education and Academic Achievements

2021 – present – Bar-Ilan University – Ph.D. candidate in Computer Science

"Coalition Formation in Sequential Decision-Making under Uncertainty", under the supervision of Prof. Noa Agmon.

2018 – 2021 – Bar-Ilan University – M.Sc. in Computer Science

"Spatial Consensus Prevention in Robotic Swarms", under the supervision of Prof. Noa Agmon. Thesis grade: 98.

2013 – 2017 – Tel-Aviv University – B.Sc. in Mathematics

B.Sc. studies in Mathematics with specialization in Computer Science.

Teaching Experience

2023 – present – Teaching Assistant – Department of Computer Science, Bar-Ilan University, Israel

- "Discrete Structures" course (Fall 2023 and Fall 2024)
  - Responsible for preparing presentations for all recitations.
  - In the 2024–2025 academic year, I served as the lead teaching assistant.
- "Machine Learning" course (Spring 2024 and Spring 2025)

Publications

Conferences

Saar Cohen and Noa Agmon. ***Egalitarianism in Online Coalition Formation*** (Extended Abstract). In AAMAS'25: Proceedings of the 24th International Conference on Autonomous Agents and Multiagent Systems, 2025. (**To Appear**)

Saar Cohen and Noa Agmon. ***Online Learning of Coalition Structures by Selfish Agents***. In AAAI'25: Proceedings of the 39th AAAI Conference on Artificial Intelligence, 2025. (**To Appear**)

Saar Cohen and Noa Agmon. ***Online Friends Partitioning under Uncertainty***. In ECAI'24: Proceedings of the 27th European Conference on Artificial Intelligence, 2024.

Saar Cohen and Noa Agmon. ***Online Learning of Partitions in Additively Separable Hedonic Games***. In IJCAI'24: Proceedings of the 33rd International Joint Conference on Artificial Intelligence, 2024.

Saar Cohen and Noa Agmon. ***Near-Optimal Online Resource Allocation in the Random-Order Model*** (Extended Abstract). In AAMAS'24: Proceedings of the 23rd International Conference on Autonomous Agents and Multiagent Systems, 2024.

Saar Cohen and Noa Agmon. ***Online Coalitional Skill Formation.*** In AAMAS'23: Proceedings of the 22nd International Conference on Autonomous Agents and Multiagent Systems, 2023.

Saar Cohen and Noa Agmon. ***Complexity of Probabilistic Inference in Reliability Dichotomous Hedonic Games.*** In AAAI '23: Proceedings of the 37th AAAI Conference on Artificial Intelligence, 2023.

Saar Cohen and Noa Agmon. ***Optimizing Multi-Agent Coordination via Hierarchical Graph Probabilistic Recursive Reasoning.*** In AAMAS'22: Proceedings of the 21st International Conference on Autonomous Agents and Multiagent Systems, 2022.

Saar Cohen and Noa Agmon. ***Convexified Graph Neural Networks for Distributed Control in Robotic Swarms.*** In IJCAI'21: Proceedings of the international Joint Conference on Artificial Intelligence, 2021.

Saar Cohen and Noa Agmon. ***On The (Im)possibility of Leading a Swarm to a Desired Consensus in Static and Dynamic Settings***. In DARS/SWARM'21: Proceedings of the 4th International Symposium on Swarm Behavior and Bio-Inspired Robotics, 2021.

Saar Cohen and Noa Agmon. ***Spatial Consensus-Prevention in Robotic Swarms***. In AAMAS'21: Proceedings of the 20th International Conference on Autonomous Agents and Multiagent Systems, 2021.

Reviews

Saar Cohen and Noa Agmon. ***Recent Advances in Formations of Multiple Robots***. Current Robotics Reports 2, 159–175, 2021.

Working Papers

Saar Cohen and Noa Agmon. ***Near-Optimal Online Resource Allocation in the Random-Order Model***. **(Submitted to AIJ)**

Saar Cohen and Noa Agmon. ***Decentralized Learning by Selfish Agents in Additively Separable Hedonic Games***.

Saar Cohen and Noa Agmon. ***Online Learning of Fair Coalition Structures***.

Saar Cohen and Noa Agmon. ***Egalitarian Welfare Maximization in Online Coalition Formation***.

Scholarships

2024 – CS@BIU Nadav Scholarship for Excellent PhD students

2023 – The President's Scholarship Program for Outstanding Doctoral Fellows: On behalf of Bar-Ilan University's president.

2022 – CS@BIU Nadav Scholarship for Excellent M.Sc. students

Reviewing Activities

2025 (Program Committee Member) – AAAI'25, AAMAS'25.

2024 (Reviewer) – ECAI'24.

2024 (Program Committee Member) – AAAI'24, IJCAI'24.

2023 (Program Committee Member) – AAAI'23, IJCAI'23.

2023 (Reviewer) – ICRA'23, ECAI'23.

2022 (Reviewer) – AAMAS'22, IEEE Transactions on Robotics (T-RO).

Military Service

2017 – 2023 – Network and Security engineer at Ofek Unit:

My job consisted of both research and engineering.

Languages

- **Hebrew**
- **English**