Itai Madar - Curriculum Vitae

Contact Information

BioFrontiers Institute
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Professional Objective

My interest is in studying and modeling the innate and learned behavior of humans and other animals, what allows a community to be more than the sum of its parts, and how it organizes, coordinates, and communicates.

Education

⋆ 2026 - Present, PhD. Candidate, Department of Computer Science, University of Colorado Boulder
- Advisor : Prof. Orit Peleg

⋆ 2023 - 2026, MSc., Department of Physics of Complex Systems, Weizmann Institute of Science
- Thesis Title : *Dynamical Critical Exponent in a 1D Driven Tracer Model*
- Advisor : Prof. Oren Raz

⋆ 2020 - 2023, BSc., Tel-Aviv University
- *Magna Cum Laude*, in Chemistry

Publications

1. **I. Madar**, D. Mukamel, O. Raz
   Critical Dynamics of a 1D Driven Tracer Model (In preparation)
2. A. Chatterjee, **I. Madar**, N. Gov, O. Feinerman
   Adapt to Bend: Ant Cooperative Transport of Soft Rods (Submitted)

Skills

Programming languages : Python, Julia, HTML.
Office software : Microsoft Office, Inkscape, LaTeX.
Scientific software LLAMPS, QChem, Autodesk Fusion.
Languages : Hebrew, English.

Awards

⋆ 2022 Ratner Fellowship for outstanding students.

Teaching

Hebrew University of Jerusalem
- 2024 - 2026 Teaching Assistant for the course 'Models and Simulations for Life Sciences'.

Other Interests

❋ Scuba and free-diving.
❋ CAD and 3D printing.
❋ Playing guitar.
❋ Humanities - Science interface.