Coral Haggiag | **Phone:** 050-309-8455 | **E-mail:** coralhaggiag@gmail.com

M.Sc. in Computer Science with 2 years of experience in research, in the field of Algorithmic Game Theory. I published and presented a paper on a top-level conference IJCAI22. I find the fields of algorithms and math very interesting as well as challenging in the best of ways. I'm looking for a challenging position as an algorithm developer with emphasis on research.

Education and Skills:

2020-2022 - **MSC Computer Science -**Ben Gurion University, **GPA – 95**

2017-2020 - **BCS Computer Science & Mathematic -**Ben Gurion University

Thesis: Tie Breaking in Contests

We present a game theoretic-model that is suitable for design contests in the crowdsourcing market, trying to study the behavior of the contestants and the organizer. We analyze this game from the point view of the contest's organizer. In crowdsourcing contests, the organizer needs to pick a reward of R to offer the players. One of our main results is that we show an algorithm for choosing the reward maximizing the organizer's utility in a polynomial time. This work required:

- Developing algorithms and runtime optimization of game planning and strategy based on researched mathematical aspects.
- Researching mathematical aspects and limits of complex problems.

Publication:

"Picking the Right Winner: Why Tie-Breaking in Crowdsourcing Contests Matters." Coral Haggiag, Sigal Oren and Ella Segev.
Appeared in The 31st International Conference on Artificial Intelligence, IJCAI'22.
Presented by me, at Messe Wien Exhibition Congress Center, Vienna, Austria.
Accepting rate: 15%, CS Ranking A*
https://www.ijcai.org/proceedings/2022/44

Focus on algorithm design courses:

- Computer Science Department: Parameterized Algorithms, Computational Genomics, Algorithms Economics and Games, Geometric Graphs, Distributed Algorithms, Group Decision Making, Design of Algorithms
- Mathematics department: Graph Theory, Game Theory, Discrete\Combinatorial Geometry, Algebraic Structures, Theory of Numbers.
- Final project in CS: Project about Wiener index in geometric network, that requires research and includes approximation algorithms and optimization algorithms.

Awards:

- Dean's List Excellency Award for Master degree, based on contribution to research.
- Annual CS dept.'s Research Excellence Awards (monetary reward).

Professional Experience:

2020 – 2022- Research assistant and TA at BGU.
2015-2018 - Mathematics Tutor
2014 – Sales at cosmetics stores in Netherlands and Belgium. The work required strong ability of interpersonal communication, great sales skills, and the ability to work under pressure.
2011-2013 -Military Service: Air Force - Fire Systems Technician of F15i combat planes: Pre-flight tests to the aircraft's firing system. The work required a great deal of responsibility and punctuality

Personal Skills:

- Passionate about algorithm theory and excellent problem-solving skills.
- Strong mathematics skills
- Strong work ethic, quick learner and a self-efficient learner.
- Excellent interpersonal skills and a team player.