### **Edan Orzech**

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I am about to graduate in 2022 from The Hebrew University of Jerusalem with a B.Sc. in Computer Science and Mathematics. I am particularly interested in research in the interface between Computer Science and Mathematics, Coding Theory and Game Theory.

#### **Education:**

2019–Present: The Hebrew University of Jerusalem, Israel.

- B.Sc. in Computer Science and Mathematics, GPA: 98 (expected graduation: 2022).
- "Amirim Computer Science Research-Oriented Excellence Program" for outstanding research-oriented undergraduate students.

2013–2019: The Hebrew University Secondary High School (with honors):

- Computer Science (10 study units), Mathematics (5 study units), English (5 study units), Arabic (5 study units).
- Final project in computer science (5 study units). Subject: Artificial Intelligence in the Game of Go. Instructor: Michael Chernovilsky.
- Undergraduate courses in Computer Science and Mathematics as part of high school studies, The Hebrew University of Jerusalem, Israel.

# **Employment:**

2021-Present:

• Teaching Assistant at the undergraduate Algorithms course. Grading students' works.

#### **Honors and Awards:**

2020-Present:

• Amirim Excellence Program full scholarship.

2019-2020:

• Dean's Award and Dean's List for the academic year 2019-2020, The School of Computer Science and Engineering.

# **Additional Studies and Projects:**

**Undergraduate Research Projects:** 

- 2021–Present: Bachelor's (Amirim) honors thesis. Supervisor: Prof. Nathan (Nati) Linial. Subject: Bounds on Unique-Neighbor Codes. Working on a paper (can be found here).
- Spring 2021: Independent Study Course. Supervisor: Prof. Noam Nisan. Subject: The Nisan-Ronen Conjecture.

Final Projects for Courses:

• Spring 2021: Hackathon in Introduction to Machine Learning. Subject: Identifying and Predicting Crimes in Chicago.

• Spring 2020: Final project in Artificial Intelligence. Subject: AI – Heuristics and Search Algorithms in Surakarta. Implemented a human-level agent using Alpha-Beta Pruning and MCTS.

# **Community Service:**

- 2018–2019: Volunteering at the Jerusalem Zoo.
- 2017–2019: Volunteering as an assistant librarian at the high school library.
- 2016–2018: Tutoring a high school student in mathematics in calculus and complex numbers and preparing for final exams.
- 2016–2018: Volunteering as an assistant coach in swimming classes and practices.

### **General Skills:**

- Highly motivated.
- Fast learner.
- Languages: Hebrew (native language), English (fluent), Arabic (intermediate level reading and writing).
- Programming languages: Python, C, C++, Java, LaTeX.

### **Interests and Activities:**

- Swimming: 2020–Present: Representing the Hebrew University swimming team in national academic competitions.
  - 2008–2018: Competitive swimmer, top 5 in Israeli National Championships.
- Trivia and History: Won 1<sup>st</sup> place in a competition of Itai Hermann (national TV trivia show "The Chase").
- Strategy games (Chess, Go, card games).