

# Alon Eden

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## APPOINTMENTS

### HARVARD UNIVERSITY

Postdoctoral Fellow

September 2019 – present | Hosted by Yiling Chen and David Parkes

## EDUCATION

### TEL AVIV UNIVERSITY

Ph.D. in Computer Science

2019 | Advisors: Michal Feldman and Amos Fiat

M.Sc in Computer Science

2014 | Advisor: Amos Fiat | Magna Cum Lauda

B.Sc in Computer Science and Psychology

2010 | CS: Magna Cum Lauda

## AWARDS AND RECOGNITION

- Best Presentation by a Student or Postdoctoral Researcher - Honorable Mention, EC 2019.
- Best Paper with a Student Lead Author Award at EC 2019.
- The 2019 Michael B. Maschler Prize to an outstanding research student in game theory and related topics in Israel.
- BSF 2018 travel award (4000 USD).
- Participant in China Theory Week 2017 – a conference gathering top TCS students.
- Best paper Award at SAGT 2017.
- Finalist of the 2017 Facebook Fellowship.
- Memorial Day Award of Excellence 2010, Computer Science Department, Tel-Aviv University.
- Dean's list of Excellence 2009, Tel Aviv University.

## PUBLICATIONS ( $\alpha - \beta$ NAME ORDERING)

### JOURNALS

1. Alon Eden, Michal Feldman, Amos Fiat, Kira Goldner, Anna R. Karlin  
Combinatorial Auctions with Interdependent Valuations: SOS to the Rescue  
Submitted to Mathematics of Operations Research (MOR).
2. Alon Eden, Uriel Feige, Michal Feldman  
Max-Min Greedy Matching  
Invited to special issue of selected APPROX 2019 papers in Theory of Computing (ToC), to appear.
3. Alon Eden, Michal Feldman, Ophir Friedler, Inbal Talgam-Cohen and S. Matthew Weinberg  
A Simple and Approximately Optimal Mechanism for a Buyer with Complements  
Operations Research (OR), 69(1):188–206, 2021.
4. Alon Eden, Michal Feldman, Adi Vardi  
Online Random Sampling for Budgeted Settings  
Special issue of selected SAGT 2017 papers in Theory of Computing Systems (TOCS), 63(7):1470-1498, 2019.

## CONFERENCES

1. Yiling Chen, Alon Eden and Juntao Wang  
Cursed yet Satisfied Agents  
**Innovations in Theoretical Computer Science (ITCS 2022).**
2. Alon Eden, Kira Goldner and Shuran Zheng  
Private Interdependent Valuations  
**ACM-SIAM Symposium on Discrete Algorithms (SODA 2022).**
3. Gianluca Brero, Alon Eden, Matthias Gerstgrasser, David C. Parkes and Duncan Rheingans-Yoo  
Reinforcement Learning of Simple Indirect Mechanisms  
**AAAI Conference on Artificial Intelligence (AAAI 2021).**  
Also appeared in ML For Economic Policy Workshop at NeurIPS 2020.
4. Alon Eden, Michal Feldman, Inbal Talgam-Cohen and Ori Zviran  
Price of Anarchy of Simple Auctions with Interdependent Values  
**AAAI Conference on Artificial Intelligence (AAAI 2021).**
5. Alon Eden, Michal Feldman, Amos Fiat, Kineret Segal  
An Economics-Based Analysis of RANKING for Online Bipartite Matching  
**SIAM Symposium on Simplicity in Algorithms (SOSA 2021).**
6. Ben Berger, Alon Eden, Michal Feldman  
On the Power and Limits of Dynamic Pricing in Combinatorial Markets  
**Conference on Web and Internet Economics (WINE 2020).**
7. Alon Eden, Michal Feldman, Amos Fiat, Kira Goldner, Anna R. Karlin  
Combinatorial Auctions with Interdependent Valuations: SOS to the Rescue  
**ACM Conference on Economics and Computation (EC 2019).**  
Best Paper with a Student Lead Author Award.
8. Alon Eden, Uriel Feige, Michal Feldman  
Max-Min Greedy Matching  
**International Conference on Approximation Algorithms for Combinatorial Optimization Problems (APPROX 2019).**
9. Ilan Reuven Cohen, Alon Eden, Amos Fiat and Lukasz Jez  
Dynamic Pricing of Servers on Trees  
**International Conference on Approximation Algorithms for Combinatorial Optimization Problems (APPROX 2019).**
10. Alon Eden, Michal Feldman, Amos Fiat, Kira Goldner  
Interdependent Values without Single-Crossing  
**ACM Conference on Economics and Computation (EC 2018).**
11. Alon Eden, Michal Feldman, Amos Fiat, Tzahi Taub  
Truthful Prompt Scheduling for Minimizing Sum of Completion Times  
**European Symposium on Algorithms (ESA 2018).**
12. Alon Eden, Michal Feldman, Ophir Friedler, Inbal Talgam-Cohen and S. Matthew Weinberg  
The Competition Complexity of Auctions: A Bulow-Klemperer Result for Multi-Dimensional Bidders  
**ACM Conference on Economics and Computation (EC 2017).**
13. Alon Eden, Michal Feldman, Ophir Friedler, Inbal Talgam-Cohen and S. Matthew Weinberg  
A Simple and Approximately Optimal Mechanism for a Buyer with Complements  
**ACM Conference on Economics and Computation (EC 2017).**
14. Alon Eden, Michal Feldman, Adi Vardi  
Online Random Sampling for Budgeted Settings  
**Symposium on Algorithmic Game Theory (SAGT 2017).**  
Best Paper Award.

15. Alon Eden, Tomer Ezra, Michal Feldman  
Pricing Social Goods  
**European Symposium on Algorithms (ESA 2017).**
16. Vincent Cohen-Addad, Alon Eden, Michal Feldman and Amos Fiat  
The Invisible Hand of Dynamic Market Pricing  
**ACM Conference on Economics and Computation (EC 2016).**
17. Shaddin Dughmi, Alon Eden, Michal Feldman, Amos Fiat and Stefano Lenoardi  
Lottery Pricing Equilibria  
**ACM Conference on Economics and Computation (EC 2016).**
18. Ilan Reuven Cohen, Alon Eden, Amos Fiat and Lukasz Jez  
Pricing Online Decisions: Beyond Auctions  
**ACM-SIAM Symposium on Discrete Algorithms (SODA 2015).**

## PREPRINTS

1. Gianluca Brero, Darshan Chakrabarti, Alon Eden, Matthias Gerstgrasser, Vincent Li and David C. Parkes  
Learning Stackelberg Equilibria in Sequential Price Mechanisms  
**Reinforcement Learning Theory workshop at ICML 2021.**

## MENTORSHIP AND ADVISING

1. **Vincent Li, Harvard University.**  
Co-advised for senior thesis with David Parkes.  
Paper under submission.
2. **Duncan Rheingans-Yoo, Harvard University.**  
Co-advised for senior thesis with David Parkes.  
Paper published in AAAI 2021.
3. **Shuran Zheng, Harvard University**  
Advised by Yiling Chen.  
Paper accepted to SODA 2022.
4. **Juntao Wang, Harvard University.**  
Advised by Yiling Chen.  
Paper accepted to ITCS 2022.
5. **Ori Zviran, Tel Aviv University.**  
Advised by Michal Feldman.  
Paper published in AAAI 2021.
6. **Ben Berger, Tel Aviv University.**  
Advised by Michal Feldman.  
Paper published in WINE 2020.
7. **Kineret Segal, Tel Aviv University.**  
Advised by Michal Feldman.  
Paper published in SODA 2021.
8. **Tzahi Taub, Tel Aviv University.**  
Advised by Michal Feldman.  
Paper published in ESA 2018.
9. **Tomer Ezra, Tel Aviv University.**  
Advised by Michal Feldman.  
Paper published in ESA 2017.

## ACADEMIC VISITS

### La Sapienza University of Rome

Hosted by Stefano Leonardi, April. 2019.

### University of Washington

Hosted by Anna Karlin, Sep. 2018.

### Simons Institute for the Theory of Computation

Participated in the "Algorithms and Uncertainty" program as a visiting student researcher, Aug.-Oct., 2016.

### École normale supérieure Paris and Université Paris Diderot,

Hosted by Claire Mahieu and Adi Rosén, Aug.-Oct., 2014.

## TALKS

### Dynamic Pricing of Servers on Trees

APPROX 2019 | MIT, September 2019.

### Combinatorial Auctions with Interdependent Valuations: SOS to the Rescue

GAMES 2020 | Online Seminar, July 2021

Israel Algorithmic Game Theory Seminar | Online Seminar, January 2021

INFORMS Annual Meeting 2020 | Online Session

EC 2019 spotlight talk | FCRC, Phoenix, June 2019

EconCS Seminar | Harvard University, October, 2019

### Max-Min Greedy Matching

Theory Seminar | Allen School of CS, University of Washington, October 2018.

Advanced Algorithms Seminar | Tel Aviv University, Dec 2018.

NetEcon 2019 | FCRC, Phoenix, June 2019.

APPROX 2019 | MIT, September 2019.

### Interdependent Values without Single-Crossing

EC 2018 | Cornell University, June 2018.

COST Workshop on Algorithmic Game Theory | Sapienza Università di Roma, March 2018, invited speaker.

### The Competition Complexity of Auctions: A Bulow-Klemperer Result for Multi-Dimensional Bidders

China Theory Week 2017 | Shanghai University of Finance and Economics, July 2017, invited speaker.

EC 2017 | MIT, June 2017.

Highlights of Algorithms conference (HALG) 2017 | TU Berlin, June 2017.

Computation and Economics Seminar 2017 | Hebrew University of Jerusalem, April 2017.

### The Invisible Hand of Dynamic Market Pricing

EC 2016 | Maastricht, July 2016.

### Lottery Pricing Equilibria

EC 2016 | Maastricht, July 2016.

### Pricing Online Decisions: Beyond Auctions

SODA 2015 | San Diego, Jan 2015.

Advanced Algorithms Seminar | Tel Aviv University, Dec 2014.

## SERVICE

### Program Committee Member

NeurIPS 2021 Workshop on Learning in Presence of Strategic Behavior.

1st ACM conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO'21).

22th ACM conference on Economics and Computation (ACM EC'21).

35th AAAI conference on Artificial Intelligence (AAAI'21).

21th ACM conference on Economics and Computation (ACM EC'20).

20th ACM conference on Economics and Computation (ACM EC'19).

1st Workshop on Mechanism Design for Social Good (MD4SG'17).

## Reviewer

Journals: Operations Research (OR), Mathematics of Operations Research (MOR), Theory of Computing Systems (TOCS).

Conferences: STOC, SODA, EC, WINE, SAGT, WWW, AAAI, MFCS.

## TEACHING

Algorithms | Tel Aviv University, 2017-2018.

Discrete Math | Tel Aviv University, 2015-2016.

C for Engineers | Tel Aviv University, 2014.

## EMPLOYMENT

Information Image Technologies (IIT) | Algorithm and Software Engineer  
2011 – 2014 | Petah Tikva, Israel

Bioinformatics Lab of Prof. Eitan Ruppin | Research Intern  
2010 | Tel Aviv University, Israel

Zoran Microelectronics | Software Engineer  
2007 - 2009 | Kfar Netter, Israel

Elite technological unit, IDF | Software Engineer  
2001 - 2005