

# Ilan Reuven Cohen

## *Curriculum Vitae*

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### *Research Interests*

My main research interest lies in the theory of algorithms. Specifically, in the areas of approximation, randomized and online algorithms with game theoretic aspects. My research goal is to develop new algorithmic techniques that improve and simplify our understanding of fundamental problems in computer science.

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### *Education*

**Tel Aviv University.** 2011–2016  
Advisor: Prof. Yossi Azar  
Dissertation: Online Packing and Covering Problems  
Ph.D. in Computer Science

**Tel Aviv University.** 2008–2010  
Advisor: Prof. Yossi Azar  
Dissertation: Prompt Mechanisms for Bounded Capacity Auction  
M.A in Computer Science  
Magna Cum Laude.  
GPA – 94.

**Technion - Israel Institute of Technology.** 2001–2004  
B.A in Computer Science  
Cum Laude.  
GPA – 90.

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### *Experience*

**Centrum Wiskunde & Informatica  
in Amsterdam** 2018-present  
Postdoctoral research fellow

**Carnegie Mellon University and  
University of Pittsburgh** 2017-2018  
Postdoctoral research fellow

**Simons-Berkeley and  
I-CORE (Israel research excellence center)** 2016-2017  
Postdoctoral research fellow

**Yahoo, New York** 2016

Algorithm designer, summer intern

Developed algorithms for ads allocation.

**LMY R&D, Tel Aviv** 2010–2012

Algorithm designer

Developed algorithms for photogrammetry and image matching.

**I.D.F.** 2004-2010

Algorithm designer

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*Teaching* **Tel Aviv University** 2013-2016  
Teaching assistant in Algorithms

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*Programming Skills* **C++, C#, Java, Matlab**  
Advanced Skills

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*Honors and Awards* **The Fulbright Post-doctoral Scholar Fellowship**  
2017  
**The Jorge Deutsch Prize**  
2016  
**The Gutwirth foundation scholarships**  
2015

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*Noteworthy Activities* **Volunteer math instructor, in Educating for Excellence program.**  
2007-2008

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*Languages* **Hebrew**  
Mother tongue  
**English**  
Fluent

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*Workshops* **The Greece Economic and Algorithmic Theory Week** 2014  
Paros, Greece

**Summer school on Algorithmic Game Theory** 2012  
Samos, Greece

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*Publications:*

**Randomized Algorithms for Online Vector Load Balancing.**

Y. Azar , I.R. Cohen, D. Panigrahi

ACM-SIAM Symposium on Discrete Algorithms, **SODA 2018**.

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**Randomized Online Matching in Regular Graphs.**

I.R. Cohen, D. Wajc

ACM-SIAM Symposium on Discrete Algorithms, **SODA 2018**.

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**Online Algorithms for Packing and Covering Problems with Convex Objectives.**

Y. Azar , I.R. Cohen, D. Panigrahi (Joint submission with two other groups)

IEEE Symposium on Foundations of Computer Science, **FOCS 2017**.

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**Online Lower Bounds via Duality.**

Y. Azar , I.R. Cohen, A. Roytman

ACM-SIAM Symposium on Discrete Algorithms, **SODA 2017**.

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**Packing Small Vectors.**

Y. Azar , I.R. Cohen, A. Fiat, A. Roytman

ACM-SIAM Symposium on Discrete Algorithms, **SODA 2016**.

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**Serving in the Dark should be done Non-Uniformly.**

Y. Azar, I.R. Cohen

Automata, Languages, and Programming International Colloquium, **ICALP 2015**.

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**Pricing Online Decisions: Beyond Auctions.**

I.R. Cohen, A. Eden, A. Fiat, L. Jez

ACM-SIAM Symposium on Discrete Algorithms, **SODA 2015**.

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**Tight Bounds for Online Vector Bin Packing.**

Y. Azar, I.R. Cohen, S. Kamara and B. Shepherd

Symposium on Theory of Computing Conference, **STOC 13**.

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**The Loss of Serving in the Dark.**

Y. Azar, I.R. Cohen and I. Gamzu

Symposium on Theory of Computing Conference, **STOC 13**.

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*Manuscripts:*

**Tight Bounds for Online Edge Coloring**

I.R. Cohen, B. Peng, D. Wajc

Submitted to STOC 2018.

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**Dynamic Pricing of Servers on Trees.**

I.R. Cohen, A. Eden, A. Fiat, L. Jez

2018

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**Online Algorithms for 2-dimensional Load Balancing**

I.R. Cohen, D. Panigrahi

2018

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