Yonatan Naamad

Personal Information	*Location:* Sunnyvale, CA	*WWW:* www.yonatan.us
	Mobile: 617-543-2068	*E-mail:* me@yonatan.us

Education

Princeton University, Princeton, New Jersey, USA

Ph.D. Computer Science (Graph Algorithms), 2017

- Advisor: Moses Charikar
- Thesis title: *Hardness from Densest Subgraph Conjectures*
- 2 years spent as visiting student at Stanford University

M.A. Computer Science (Theory), 2013

- Advisor: Moses Charikar

Rensselaer Polytechnic Institute, Troy, New York, USA

M.S. Applied Mathematics, 2011

- Advisor: Peter Kramer

B.S. Computer Science and Mathematics, 2011

- Summa Cum Laude

Appointments

Amazon.com, Inc.

Intern → Applied Scientist → Senior Applied Scientist

- AWS Analytics — **February 2021 - Present**
- Health & Wellness — **June 2018 - February 2021**
- Core Machine Learning / AWS AI Lab — **June 2017 - June 2018**
- Core Machine Learning — **Summer 2016**

Princeton University

Assistant Instructor

- Networks, Economics, and Computation — **Spring 2013**
- Networks, Economics, and Computation — **Fall 2012**

Rensselaer Polytechnic Institute

Teaching Assistant

- *Graduate TA* - Calculus II — **Spring 2011**
- *Graduate TA* - Introduction to Discrete Structures — **Fall 2010**
- *Graduate TA* - Multivariable Calculus & Matrix Algebra — **Spring 2010**
- *Undergraduate TA* - Introduction to Logic — **Fall 2009**
- *Undergraduate TA* - Data Structures and Algorithms — **Spring 2009**

World Bank

Temporary Employee

- Short Term Temp - Database Imputation — **Summer 2009**

EMC Corporation (now Dell EMC)

Summer Intern

- Technical Competitive Analysis Group Intern - Data Warehousing — **Summer 2007**
- Performance Group Intern - Caching Strategies — **Summer 2005**

Service

Better Science Campaign 501(c)(3)

Board Member

- Strategic Initiatives Director **January 2025 - Present**

Research

T. Wagner, Y. Naamad, N. Mishra "Fast Private Kernel Density Estimation via Locality Sensitive Quantization" *Proceedings of the 40th International Conference on Machine Learning (ICML) 2023. Oral presentation.*

S. Nagesh, N. Mishra, Y. Naamad, J. Rehg, M. Shah, A. Wagner "Explaining a machine learning decision to physicians via counterfactuals" *Proceedings of the Conference on Health, Inference, and Learning (CHIL) 2023.*

P. Parchas, Y. Naamad, P. Van Bouwel, C. Faloutsos, M. Petropoulos "Fast and Effective Distribution-Key Recommendation for Amazon Redshift" *Proceedings of the 46th International Conference on Very Large Data Bases (VLDB), 2020.*

D. Eswaran, C. Faloutsos, N. Mishra, Y. Naamad "Intervention-Aware Early Warning" *Proceedings of the 19th Industrial Conference on Data Mining (ICDM) 2019*

M. Charikar, Y. Naamad, J. Rexford, X. Zou "Multi-Commodity Flow with In-Network Processing" *Proceedings of the 4th International Symposium on Algorithmic Aspects of Cloud Computing (ALGOCLOUD) 2018*

M. Charikar, Y. Naamad, A. Wirth "On Approximating Target Set Selection" *Proceedings of the 19th International Workshop on Approximation Algorithms for Combinatorial Problems (APPROX) 2016*

M. Chakraborty, S. Das, A. Lavoie, M. Magdon-Ismail, Y. Naamad "Instructor Rating Markets" *Proceedings of the Twenty-Seventh AAAI Conference on Artificial Intelligence (AAAI) 2013*

> Abstract appeared in the *Proceedings of the Second Conference in Auctions, Market Mechanisms, and Their Applications (AMMA) 2011*

E. Anshelevich, S. Das, Y. Naamad "Anarchy, Stability, and Utopia: Creating Better Matchings" *Autonomous Agents and Multi-Agent Systems (AAMAS) 2013*

> Prior conference version appeared in *Proceedings of the 2nd International Symposium on Algorithmic Game Theory (SAGT) 2009*

M. Charikar, Y. Naamad, J. Wu "On Finding Dense Common Subgraphs" *Manuscript*

M. Charikar, Y. Naamad, A. Wirth "On DkS-hardness for MinRep-hard Problems" *Manuscript*

Patents

M. Shyani, Y. Naamad, S. Nagesh "Filter Direction Modifications to Vector-Based Search", U.S. Patent #12,423,310. September 23, 2025

S. Kasiviswanathan, N. Mishra, Y. Naamad "System and Method for Generating Causal Insights in Health and Wellness Wearables", U.S. Patent #11,853,912. December 26, 2023

Y. Naamad, S. Kasiviswanathan, N. Mishra, M. Monemizadeh, L. Moos, J. Tokle "Systems, methods, and apparatus for hotspot detection", U.S. Patent #11,797,572. October 24, 2023

Y. Naamad, N. Mishra "Question Answering System", U.S. Patent #10,713,289. July 14, 2020

Awards

COMAP Mathematical Contest in Modeling

- Outstanding Winner for 2011 Problem B (Repeater Coordination)
- Outstanding Winner (SIAM Prize) for 2010 Problem B (Criminology)

Princeton University

- Computer Science Graduate Teaching Award

Rensselaer Polytechnic Institute

- Paul A. McGloin Prize (given to one outstanding senior in Computer Science)
- Founders Award of Excellence (given to $\sim 1\%$ of undergraduates)
- RPI-UPE Programming Competition - Second Place
- Distinction on RPI Mathematics PhD Preliminary Exam (top scorer)

Skills

Development: (**bold** preferred)	**C**, C++, **C#**, Go, Haskell, **Java**, **Javascript**, PHP, **Python**, Scheme, SQL
Tools:	Arduino, AWS, Git, Keras, LaTeX, Matlab, PyTorch, Unity
Languages:	English (native), Hebrew (native), Spanish (elementary)

Authorization

U.S. Citizen - No sponsorship required.