

Yonatan Naamad

PERSONAL INFORMATION *Location:* Sunnyvale, CA *WWW:* www.yonatan.us
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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

RPI / Princeton
Teaching Assistant / Assistant Instructor
• *Assistant Instructor* - Networks, Economics, and Computation Spring 2013
• *Assistant Instructor* - Networks, Economics, and Computation Fall 2012
• *Teaching Assistant* - Calculus II Spring 2011
• *Teaching Assistant* - Introduction to Discrete Structures Fall 2010
• *Teaching Assistant* - Multivariable Calculus & Matrix Algebra Spring 2010
• *Undergraduate Teaching Assistant* - Introduction to Logic Fall 2009
• *Undergraduate Teaching Assistant* - Data Structures and Algorithms Spring 2009

World Bank
Temporary Employee
• Short Term Temp - Databases / Imputation Summer 2009

EMC Corporation (now Dell EMC)
Summer Intern
• Technical Competitive Analysis Group Intern Summer 2007
• Performance Group Intern Summer 2005

RESEARCH	<p>T. Wagner, Y. Naamad, N. Mishra “Fast Private Kernel Density Estimation via Locality Sensitive Quantization” <i>To appear in the Proceedings of the 40th International Conference on Machine Learning (ICML) 2023. Oral presentation.</i></p> <p>S. Nagesh, N. Mishra, Y. Naamad, J. Rehg, M. Shah, A. Wagner “Explaining a machine learning decision to physicians via counterfactuals” <i>To appear in the Proceedings of the Conference on Health, Inference, and Learning (CHIL) 2023.</i></p> <p>P. Parchas, Y. Naamad, P. Van Bouwel, C. Faloutsos, M. Petropoulos “Fast and Effective Distribution-Key Recommendation for Amazon Redshift” <i>Proceedings of the 46th International Conference on Very Large Data Bases (VLDB), 2020.</i></p> <p>D. Eswaran, C. Faloutsos, N. Mishra, Y. Naamad , “Intervention-Aware Early Warning” <i>Proceedings of the 19th Industrial Conference on Data Mining (ICDM) 2019</i></p> <p>M. Charikar, Y. Naamad, J. Rexford, X. Zou “Multi-Commodity Flow with In-Network Processing” <i>Proceedings of the 4th International Symposium on Algorithmic Aspects of Cloud Computing (ALGO CLOUD) 2018</i></p> <p>M. Charikar, Y. Naamad, A. Wirth “On Approximating Target Set Selection” <i>Proceedings of the 19th International Workshop on Approximation Algorithms for Combinatorial Problems (APPROX) 2016</i></p> <p>M. Chakraborty, S. Das, A. Lavoie, M. Magdon-Ismael, Y. Naamad “Instructor Rating Markets” <i>Proceedings of the Twenty-Seventh AAAI Conference on Artificial Intelligence (AAAI) 2013</i> Abstract appeared in the <i>Proceedings of the Second Conference in Auctions, Market Mechanisms, and Their Applications (AMMA) 2011</i></p> <p>E. Anshelevich, S. Das, Y. Naamad “Anarchy, Stability, and Utopia: Creating Better Matchings” <i>Autonomous Agents and Multi-Agent Systems (AAMAS) 2013</i> Prior conference version appeared in <i>Proceedings of the 2nd International Symposium on Algorithmic Game Theory (SAGT) 2009</i></p> <p>M. Charikar, Y. Naamad, J. Wu “On Finding Dense Common Subgraphs” <i>Manuscript</i></p> <p>M. Charikar, Y. Naamad, A. Wirth “On DkS-hardness for MinRep-hard Problems” <i>Manuscript</i></p>
PATENTS	<p>N. Mishra, Y. Naamad “Question Answering System”, U.S. Patent #10,713,289. July 14, 2020</p>
AWARDS	<p>COMAP Mathematical Contest in Modeling</p> <ul style="list-style-type: none"> • Outstanding Winner for 2011 Problem B (Repeater Coordination) • Outstanding Winner (SIAM Prize) for 2010 Problem B (Criminology) <p>Princeton Internal Awards</p> <ul style="list-style-type: none"> • Computer Science Graduate Teaching Award <p>RPI Internal Awards</p> <ul style="list-style-type: none"> • Paul A. McGloin Prize (given to one outstanding senior in CS) • Founders Award of Excellence (given to 1% of undergraduates) • RPI-UPE Programming Competition - Second Place • Distinction on RPI Mathematics PhD Preliminary Exam (top scorer)
SKILLS	<p>Development: C, C++, C#, Go, Haskell, Java, Javascript, Julia, Lua, Matlab, (bold preferred) MIPS, PHP, Prolog, Python, Scheme, SQL, VB6/.Net</p> <p>Tools: Arduino, Git, Keras, L^AT_EX, PyTorch, Unity</p> <p>Languages: English (native), Hebrew (native), Spanish (elementary)</p>