EDUCATION

MIT

- Ph.D. Candidate, Electrical Engineering and Computer Science
  Thesis: The Theory of Occluder-based Non-line-of-sight Imaging
  Committee: Gregory Wornell (advisor), Bill Freeman, Frédéric Durand
  Research Interests: Computational Imaging, Machine Learning, Optimization
  Selected Courses: Inference Algorithms, Machine Learning, Inference and Information,
  Computer System Architecture, Digital Systems Laboratory
  GPA: 4.8/5.0
  Summer 2020

- M.Eng., Electrical Engineering and Computer Science
  Thesis: A Relatively Small Turing Machine Whose Behavior is Independent of Set Theory
  Advisor: Scott Aaronson
  June 2015

- B.S., Electrical Engineering and Computer Science
  Selected Grad Courses: Seminar in Information Theory, Advanced Algorithms,
  Theory of Computation, Advanced Data Structures, Cryptography and Cryptanalysis
  GPA 5.0/5.0
  June 2014

PUBLICATIONS

- Andrea Lincoln, Adam Yedidia, “Faster Random $k$-CNF Satisfiability,” in submission to STOC 2020.
- Miika Aittala, Prafull Sharma, Lukas Murmann, Adam Yedidia, Gregory W. Wornell, William T. Freeman, Frédéric Durand, “Computational Mirrors: Blind Inverse Light Transport by Deep Matrix Factorization,” NeurIPS 2019.
- Adam B. Yedidia, Manel Baradad, Christos Thrampoulidis, William T. Freeman, Gregory W. Wornell, “Using Unknown Occluders to Recover Hidden Scenes,” CVPR 2019.
- Ganesh Ajjanagadde, Christos Thrampoulidis, Adam Yedidia, Gregory Wornell, “Near-Optimal Coded Apertures for Imaging via Nazarov’s Theorem,” ICASSP 2019.
- Richard P. Brent, Adam Yedidia “Computation of Maximal Determinants of Binary Circulant Matrices,” Journal of Integer Sequences 2018.
- Manel Baradad, Vickie Ye, Adam Yedidia, Frédéric Durand, William T. Freeman, Gregory W. Wornell, Antonio Torralba, “Inferring Light Fields From Shadows,” CVPR 2018.
- Adam Yedidia, Christos Thrampoulidis, Gregory Wornell, “Analysis and Optimization of Aperture Design in Computational Imaging,” ICASSP 2018.
- Katie L. Bouman, Vickie Ye, Adam Yedidia, Frédéric Durand, Gregory W. Wornell, Antonio Torralba, William T. Freeman, “Turning Corners into Cameras: Principles and Methods,” ICCV, 2017.
- Manisha Bahl, Regina Barzilay, Adam Yedidia, Nicholas J. Locascio, Lili Yu, Constance D. Lehman, “High-Risk Breast Lesions: A Machine Learning Model to Predict Pathologic Upgrade and Reduce Unnecessary Surgical Excision,” Radiology, 2017.
- Adam Yedidia and Scott Aaronson, “A Relatively Small Turing Machine Whose Behavior Is Independent of Set Theory,” Complex Systems, 2016.
- Erik Demaine, Tim Kaler, Quanquan Liu, Aaron Sidford, and Adam Yedidia, “Polylogarithmic Fully Retroactive Priority Queues via Hierarchical Checkpointing,” Workshop on Algorithms and Data Structures, 2015.
- Michael Chertkov and and Adam Yedidia, “Approximating the Permanent with Fractional Belief Propagation,” in Journal of Machine Learning Research, 2013.

PROFESSIONAL EXPERIENCE

High school teacher, Maimonides High School
Teaching four classes: honors geometry, accelerated geometry, honors algebra 2, AP Statistics
January 2023-June 2023
Fullstack software developer, finance company  
January 2021-November 2022
Used Python and Javascript React to build and maintain an API interface using Flask to interact with Redis and Postgres databases (using the SQLAlchemy package)

PhD Student, MIT  
Fall 2015-Summer 2020
Teaching Assistant, MIT  
Fall 2019
Mathematics for Computer Science (6.042)  
Cambridge, MA
Average Evaluation: 6.8/7.0

Research Intern, OpenAI  
Summer 2019
Reinforcement Learning Team  
San Francisco, CA
Learning Optimization Research

Teaching Assistant, MIT  
Spring 2015
Automata, Computability, and Complexity (6.045)  
Cambridge, MA
Average Evaluation: 6.8/7.0

Teaching Assistant, MIT  
Fall 2014
Introduction to Algorithms (6.006)  
Cambridge, MA
Average Evaluation: 6.6/7.0

Teaching Assistant, MIT  
Fall 2019
Mathematics for Computer Science (6.042)  
Cambridge, MA
Average Evaluation: 6.8/7.0

Teaching Assistant, MIT  
Spring 2015
Automata, Computability, and Complexity (6.045)  
Cambridge, MA
Average Evaluation: 6.8/7.0

Trading Intern, Jane Street  
Summer 2014
International ETFs and ADRs  
New York City, NY
Statistics and Data Analysis

Summer Intern, MIT  
Summer 2013
Prof. David Gamarnik, MIT  
Cambridge, MA
Research on Graphical Models

Summer Intern, Capital Fund Management  
Summer 2012
Prof. Jean-Philippe Bouchaud  
Paris, France
Portfolio Optimization

Summer Intern, Los Alamos National Laboratory  
Summers 2010 and 2011
Dr. Michael Chertkov  
Los Alamos, NM
Machine Learning, Belief Propagation

Camp Counselor, Buckingham, Browne & Nichols School  
Summers 2007-2009

AWARDS & ACHIEVEMENTS

• Public Speaking award for presentation of Karatsuba’s Algorithm, 2013
• Elected Phi Beta Kappa, 2014
• MIT Best Master’s Thesis, 2015

PROGRAMMING SKILLS

• I actively use Python and Tensorflow in my current research and am a highly experienced Python programmer. I also have experience with Java, C++, Verilog, and MATLAB.

LANGUAGES

• I speak English natively and French fluently. I attended a bilingual French-English school through eighth grade.