Arsen Vasilyan

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Research Interests

- Computational learning theory
- Distribution learning and testing
- Computational statistics
- Algorithms more generally

Education

Massachusetts Institute of Technology(MIT) June 2020 - present
Ph.D. Candidate in Computer Science
Advisors: Jonathan Kelner, Ronitt Rubinfeld

Massachusetts Institute of Technology(MIT) September 2019 - June 2020
M.S. in Electrical Engineering and Computer Science GPA: 5.0
Thesis: *Approximating the Noise Sensitivity of a Monotone Boolean Function*
Advisor: Ronitt Rubinfeld

Massachusetts Institute of Technology(MIT) September 2016 - June 2019
B.S. in Computer Science GPA: 5.0
Minor in Physics / Minor in Philosophy

Relevant coursework: *Advanced Algorithms, Algorithmist's Toolkit, Inference and Information, Algorithms for Inference, Information theory in Computer Science, Computational Geometry, Randomness and Computation, Fine-grained Computation, Cryptography and Cryptanalysis, Learning with Errors and Post-Quantum Cryptography, Quantum physics I, II, Statistical physics I, General relativity, Algebraic Combinatorics, Elliptic Curves, Intro to Algebraic Geometry*

Publications

Monotone Probability Distributions over the Boolean Cube Can Be Learned with Sublinear Samples
Ronitt Rubinfeld, **Arsen Vasilyan**
11th Innovations in Theoretical Computer Science Conference (**ITCS 2020**)

Approximating the Noise Sensitivity of a Monotone Boolean Function
Ronitt Rubinfeld, **Arsen Vasilyan**
Approximation, Randomization, and Combinatorial Optimization. Algorithms and Techniques (**APPROX/RANDOM 2019**).

Research Experience

- **Kelner group (MIT)** *September 2019 – present*
- **Rubinfeld Group (MIT)** *June 2018 – present*
- **Madry Group (MIT)** *June 2017 – June 2018*

Awards

- **Silver Medal–International Physics Olympiad** **Astana, Kazakhstan**
  July 2014