Arsen Vasilyan

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Research Interests

- Computational learning theory
- Distribution learning and testing
- Computational statistics
- Property testing

Education

 $Mass a chusetts \ Institute \ of \ Technology (MIT)$

June 2020 - present

Ph.D. Candidate in Computer Science

Advisors: Jonathan Kelner, Ronitt Rubinfeld

Massachusetts Institute of Technology(MIT) M.S. in Electrical Engineering and Computer Science September 2019 - June 2020

GPA: 5.0

Thesis: Approximating the Noise Sensitivity of a Monotone Boolean Function

Advisor: Ronitt Rubinfeld

Massachusetts Institute of Technology(MIT) B.S. in Computer Science

Minor in Physics / Minor in Philosophy

September 2016 - June 2019

GPA: 5.0

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)

• Rubinfeld Group (MIT)

• Madry Group (MIT)

September 2019 – present

June 2018 – present

June 2017 – June 2018

Awards

• Silver Medal–International Physics Olympiad

Astana, Kazakhstan July 2014