KARINE CHUBARIAN

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Department of Mathematics, Statistics and Computer Science
University of Illinois at Chicago

EDUCATION

University of Illinois in Chicago
PhD Candidate, Mathematical Computer Science
Advisors (in alphabetical order): Anastasios Sidiropoulos, György Turán
August 2016 - Present

Southern Federal University, Rostov-on-Don, Russia
Master of Science
Mathematics   *With Distinction*
July 2014

Bachelor of Science
Applied Mathematics and Computer Science   *Summa Cum Laude*
June 2012

RESEARCH EXPERIENCE

Authors are listed in alphabetical order.

1. K. Chubarian, A. Sidiropoulos, *Computing Bi-Lipschitz Outlier Embeddings into the Line*, 2020, In Progress

2. K. Chubarian, G. Turán, *Interpretability of Bayesian Network Classifiers: OBDD Approximation and Polynomial Threshold Functions*, 2019, Submitted

3. Master's Thesis: *Perturbance of Toeplitz Matrices by Small Ranked Matrices*, advisor: A. Kozak

4. Bachelor's Thesis: *The Influence of Perturbations on the Limit of the Spectrum of Toeplitz Matrices*, advisor: A. Kozak

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TEACHING EXPERIENCE

Grader   University of Illinois at Chicago
                                                                              Summer 2019 - Present

- **Spring 2020 and Summer 2019:** MCS 401 "Computer Algorithms" (Homework Grading and Office Hours)

Teaching Assistant   University of Illinois at Chicago
                                                                              Fall 2016 - Fall 2019

- MATH 122 "Emerging Scholars Workshop for Precalculus" (Primary Instructor)
- MATH 121 "Precalculus"
- MATH 410 "Computer Algorithms"
- MATH 125 "Linear Algebra for Business"
- MATH 110 "College Algebra"
- MATH 118 "Mathematical Reasoning"

Student Tutor   Southern Federal University
                                                           Fall 2012 - Spring 2014

- Calculus I
- Calculus II
- Linear Algebra
- Analytic Geometry
- Introduction to Computer Science

TALKS GIVEN **Computing Bi-Lipschitz Outlier Embeddings into the Line** (Poster)
TRIPODS Open House

Interpretability of Bayesian Network Classifiers
International Symposium on Artificial Intelligence and Mathematics ISAIM 2020
70th Midwest Theory Day

Intro to PAC Learning   Fall 2018
UIC Undergraduate Math Club

Embedding of Graphs in Line   Spring 2018
UIC Graduate Mathematical Computer Science Seminar

On Scott Aaronson P-NP Survey   Fall 2017
UIC Graduate Mathematical Computer Science Seminar

CONFERENCES AND WORKSHOPS ATTENDED

TRIPODS Open House   January 17, 2020
Poster Presenter, University of Illinois at Chicago   Chicago

**International Symposium on Artificial Intelligence
and Mathematics ISAIM 2020**   January 6-8, 2020
Presenter   Fort Lauderdale

70th Midwest Theory Day   November 23, 2019
Presenter, Illinois Institute of Technology   Chicago

2019 Junior Theorists Workshop   November 14-15, 2019
Attendee, Northwestern University   Evanston

Swedish Summer School in Computer Science 2019   Summer 2019
Attendee, KTH Royal Institute of Technology   Stockholm

Machine Learning Summer Workshop   June 18-29, 2018
Attendee, Toyota Technological Institute   Chicago

Midwest Symposium for Women in Mathematics   April 7, 2018
Attendee, Purdue University   West Lafayette