Ludmila Glinskih

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Education

Boston University   2019 – present
PhD (in progress), *Theoretical Computer Science*
Advisors: Dr. Sofya Raskhodnikova and Dr. Mark Bun
GPA: 4.0

St. Petersburg Department of Steklov Institute of Mathematics of Russian   2017 – 2019
Academy of Sciences
Research and graduate coursework on Theoretical Computer Science
Advisor: Dr. Dmitry Itsykson

St. Petersburg Academic University of Russian Academy of Sciences   2015 – 2017
M.Sc., *Theoretical Computer Science*
Thesis: **"Satisfiable Tseitin formulas are hard for nondeterministic read-once
branching programs"**
Advisor: Dr. Dmitry Itsykson

Peter the Great Saint-Petersburg Polytechnic University   2009 – 2014
B.Sc., *Applied Mathematics and Computer Science*

Publications

The Complexity of Verifying Boolean Programs as Differentially Private
Mark Bun, Marco Gaboardi, Ludmila Glinskih
To appear in proceedings of CSF 2022

On Tseitin Formulas, Read-Once Branching Programs and Treewidth
Ludmila Glinskih, Dmitry Itsykson
CSR 2019, **Best Paper Award winner**, invited to special issue of Theory of Computing Systems

Satisfiable Tseitin formulas are hard for nondeterministic read-once branching programs
Ludmila Glinskih and Dmitry Itsykson
MFCS 2017

Talks

The Complexity of Verifying Boolean Programs as Differentially Private   Nov 22, 2021
Seminar of the Privacy Tools Project, Harvard University, Virtual

The Complexity of Verifying Boolean Programs as Differentially Private   Apr 24, 2021
CRA-WP Grad Cohort for Women, Virtual

Circuit Lower Bounds from NP-Hardness of MCSP Under Turing Reductions   Feb 22, 2021
MCSP reading group, Boston University, Boston, USA

Relations and Equivalences Between Circuit Lower Bounds and Karp-Lipton Theorems   Nov 2, 2020
MCSP reading group, Boston University, Boston, USA

Lower bounds for MCSP for restricted circuit models   Aug 6, 2020
MCSP reading group, Boston University, Boston, USA

A survey on the Minimum Circuit Size Problem   Jun 12, 2020
MCSP reading group, Boston University, Boston, USA

Lower bounds for Read-Once Branching Programs for Tseitin formulas   Oct 28, 2019
Theory Seminar, Boston University, Boston, USA

On branching programs, Tseitin formulas and tree-width   Mar 7, 2019
24th Estonian Winter School in Computer Science, Palmse, Estonia

Lower bounds for Branching Program and Formula for Orthogonal Vectors   Nov 16, 2018
Seminar of the Laboratory of Algorithmic Methods, PDMI RAS,
St. Petersburg, Russia

Lower bound for read-once nondeterministic branching program for   Jul 9, 2018
satisfiable Tseitin formula using tree-width
Workshop of Summer School on Algorithms and Lower Bounds, Satellite workshop
of ICALP, Prague, Czech Republic

On branching programs, Tseitin formulas and tree-width   Jun 26, 2018
Poster at ACM STOC, Los Angeles, USA

Lower Bounds for Nondeterministic Semantic Read-Once Branching Programs   May 4, 2018
Complexity Seminar, PDMI RAS, St. Petersburg Russia

Satisfiable Tseitin formulas are hard for nondeterministic read-once   Nov 24, 2017
branching programs
Joint Estonian–Latvian Theory Days, Tartu, Estonia

Satisfiable Tseitin formulas are hard for nondeterministic read-once   Aug 25, 2017
branching programs
MFCS, Aalborg, Denmark

Techniques of proving lower bounds on Query Complexity   Oct 14, 2016
Seminar on Sublinear Algorithms, Computer Science Club,
St. Petersburg, Russia

Scholarships and Awards

Dean's Fellowship   Fall 2019
Awarded to PhD students at Boston University

CSR 2019 Best Paper Award   July 2019
Paper: *On Tseitin Formulas, Read-Once Branching Programs and Treewidth*
Ludmila Glinskih, Dmitry Itsykson

TCS Women Travel Scholarship   June 2018
For attending ACM STOC 2018

Yandex Research Fellowship   Fall 2015 – Spring 2017
Awarded to Master's students at St. Petersburg Academic University RAS

Teaching

Grader   Fall 2021
CS537: *Graduate Randomness in Computing*
Taught by Sofya Raskhodnikova at Boston University

Teaching Fellow   Fall 2020
CS 535: Graduate Complexity Theory
Taught by Mark Bun at Boston University

Teaching Assistant   Spring 2018
Complexity Theory and Randomized Algorithms
Taught by Ivan Bliznets at St. Petersburg Academic University RAS

Academic Service

Reviewer for CSR 2019, STOC 2020

Organizer of a reading group on a Minimum Circuit Size Problem (MCSP)   Summer 2020 – present
at Boston University during Summer and Fall semester 2020

Author of a Telegram channel (in Russian) with advice for junior   2018 – present
researchers

Other Activities

Maintainer of FFmpeg, responsible for API test   2015 – present
FFmpeg is the leading open source multimedia framework

Member of the University Women's Soccer Team at SPbPU   2009 – 2014

Participation in Events

Computational Complexity Conference   Jul 28 – Jul 30, 2020
Online

52th ACM Symposium on Theory of Computing (STOC),   Jun 22 – Jun 26, 2020
Online

Hilbert–Bernays Summer School on Logic and Computation,   Jul 21 – Jul 27, 2019
Tübingen, Germany
Expenses covered by a scholarship from the organizers

Caleidoscope: Complexity as a Kaleidoscope,   Jun 17 – Jun 21, 2019
Paris, France

24th Estonian Winter School in Computer Science, Palmse, Estonia *Expenses covered by a scholarship from the organizers*	Mar 3 – Mar 8, 2019
Summer School on Algorithms and Lower Bounds, Prague, Czech Republic *Expenses covered by a scholarship from the organizers*	Jul 6 – Jul 9, 2018
50th ACM Symposium on Theory of Computing (STOC), Los Angeles, USA *Travel expenses covered by TCS Women scholarship*	Jun 25 – Jun 29, 2018
Recent Advances in Algorithms, St. Petersburg, Russia	May 22 – May 26, 2018
Recent Advances in Parameterized Complexity, Tel Aviv, Israel	Dec 3 – Dec 7, 2017
Swedish Summer School in Computer Science (S3CS), Stockholm, Sweden *Expenses covered by a scholarship from the organizers*	Jul 16 – Jul 22, 2017
A Special Semester on Computational and Proof Complexity, St. Petersburg, Russia	Apr – Jun, 2016

Industry Experience

Google San Francisco   May 2021 – Aug 2021
Software Engineering Intern (*Cobalt)*
Added a Golang library for optimal computations of privacy encoding parameters in Cobalt
– a framework for differentially private telemetry collection
(https://fuchsia.googlesource.com/cobalt).
Implemented a Golang library for fast computations of privacy loss distribution.

Google Zurich   Apr 2019 – Jul 2019
Site Reliability Engineering Intern (*Serving Backend SRE Team)*
Added support of integration testing and multiple integration tests for an internal load
testing tool used for testing Google Search. Used internal configuration languages and
Python.

Google London   Jun 2017 – Sep 2017
Site Reliability Engineering Intern (*SRE Traffic Team)*
Added dynamical status updates to the internal code review tool from the tool that
automatically rebuilds configuration files. Used Golang.

Google Zurich   Jul 2016 – Oct 2016
Site Reliability Engineering Intern (*YouTube Core SRE Team)*
Added support of refined estimations of load on YouTube backends to improve resistance
of YouTube internal services from overloading by requests from internal users. Used
Python, C++, and JavaScript.

FFmpeg   May 2015 – Aug 2015
Software Engineering Intern
Built a suite of tests in C for FFmpeg API.

Yandex   Oct 2012 – May 2015
Quality Assurance Engineer (*Yandex.Maps Team)*
Took a leading role in quality assurance of a cartographical project similar to
OpenStreetMap and ArcGIC (https://n.maps.yandex.ru)