Mikhail Stepanovich Ivkov

63 Abrams Court, Apartment 319, Stanford, CA 94305, USA
mishai@stanford.edu • https://mivkov.github.io • +1 (408) 250-8460

EDUCATION

Stanford University, Stanford, California, USA — Sep 2021 – Present
- Pursuing a PhD in Computer Science, in the Theory group.

Carnegie Mellon University, Pittsburgh, Pennsylvania, USA — Aug 2017 – May 2021
- Bachelor of Science in Computer Science (Algorithms Concentration), Math Minor
  - **GPA**: 3.85/4.0, Dean's List every semester

RESEARCH EXPERIENCE

Stanford University
- Advised by Professor Tselil Schramm and Professor Nima Anari — Sep 2021 – Present
  - Working on unifying algorithmic frameworks under a common convex relaxation (Sum of Squares)
  - Working on speeding up Markov Chain Monte Carlo problems in special instances.

Carnegie Mellon University
- Undergraduate Honors Thesis, advised by Professor Pravesh K. Kothari — Jan 2020 – May 2021
  - Paper on List Decodable Covariance Estimation accepted to and presented at STOC '22.

WORK EXPERIENCE

Sundeck, Menlo Park, California, USA
- Software Engineering Intern — Jun 2022 – Sep 2022
  - Core founding member of the SQL Analysis team, wrote a SQL parser in Go and implemented logical planning features.

Jane Street, New York, New York, USA
- Quantitative Research Intern — Jun 2021 – Aug 2021

Dropbox, Remote
- Software Engineering Intern – Storage Platform Team — May 2020 – Aug 2020

MongoDB, New York, New York, USA
- Software Engineering Intern – Query Team — May 2019 – Aug 2019

Dremio Corporation, Santa Clara, California, USA
- Software Engineering Intern – Acceleration Team — May 2018 – Aug 2018
- Software Engineering Intern - UI — Jun 2017 – Aug 2017

MapR Data Technologies, San Jose, California, USA
- Software Engineering Intern – QA — Jun 2016 – Aug 2016

TEACHING EXPERIENCE

Stanford University
- CS 161 (Design and Analysis of Algorithms) Teaching Fellow — Jun 2023 – Aug 2023
  - Designed all lecture materials, homework assignments, and exams.
  - Introduced extra topics to course (treaps, segment trees, optimization).
- CS 161 (Design and Analysis of Algorithms) Head Teaching Assistant — Sep 2022 – Dec 2022

Carnegie Mellon University
- 15-251 (Theoretical Computer Science) Head Teaching Assistant — Aug 2020 – May 2021
- 98-174 (Great Ideas in Tech Interviews & Coding Screens) Co-Instructor — Aug 2020 – May 2021
  - Created and taught a student taught crash course on techniques which are useful for coding interviews.
  - Designed and wrote half of all lectures and homeworks.
  - Wrote all Java and C++ autograders for these problems, and approximately half of the Python autograders.
- 15-259 (Probability and Computing) Head Teaching Assistant — Jan 2020 – May 2020
- 15-251 and 15-259 Teaching assistant (alternating fall and spring) — Aug 2018 – May 2020

ACHIEVEMENTS

- NSF GRFP Fellow — Sep 2023 – Present
- ACM-ICPC World Finals Qualifier (happening in November) — May 2023
  - Team won 7th place at North America Championship
- School of Engineering Fellowship (Stanford) — Sep 2021 – Jun 2022
  - Awarded to top 10% of incoming CS graduate students
- Alan J. Perlis Student Teaching Award (CMU) — May 2021
  - Awarded to best student TA within the CS department
- Mark Stehlik Alumni Undergraduate Impact Scholarship (CMU)
  - Awarded for excellence in improving the School of Computer Science — May 2021

LANGUAGES ▪ English: Native Language. ▪ Russian: Native Language.

PROGRAMMING LaTeX, Mathematica, C++, Python, Java, Go, Shell Scripting, Drill SQL, MongoDB.

INTERESTS Competition math, Competitive programming, water polo, volleyball, CS for all, piano.