Vaibhav Krishan

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Profile pages: Homepage, DBLP, Google Scholar, ECCC (Personal account), ORCID

Education

Doctoral Student — Indian Institute of Technology Bombay — 2017-Present
Computer Science and Engineering — CPI: 9.09/10

Bachelor of Technology — Indian Institute of Technology Bombay — 2009-2013
Computer Science and Engineering — CPI: 7.59/10

Journal Publications

Algorithmica 2022
A #SAT Algorithm for Small Constant-depth Circuits with PTF gates
with Swapnam Bajpai, Deepanshu Kush, Nutan Limaye and Srikanth Srinivasan
Algorithmica 84, 1132-1162 (2022).

Conference Publications

CSR 2021
Upper Bound for Torus Polynomials
The 16th International Computer Science Symposium in Russia, CSR 2021.

ITCS 2019
A #SAT Algorithm for Small Constant-depth Circuits with PTF gates
with Swapnam Bajpai, Deepanshu Kush, Nutan Limaye and Srikanth Srinivasan
The 10th 10th Innovations in Theoretical Computer Science Conference, ITCS 2019.

Preprints

ECCC
MidBit^{+}, Torus Polynomials and Non-classical Polynomials: Equivalences for ACC Lower Bounds

ECCC
Isolation Lemma for Directed Reachability and NL vs. L
with Nutan Limaye

Talks and Presentations

Presentation
Upper Bound for Torus Polynomials
The 16th International Computer Science Symposium in Russia, CSR 2021. (online)

Presentation and Poster
A #SAT Algorithm for Small Constant-depth Circuits with PTF gates
The 10th Innovations in Theoretical Computer Science Conference, ITCS 2019.

Teaching Assistance

- CS 310(Automata Theory, twice, awarded best TA of the month)
- CS 721(Introduction to Computational Complexity)
- CS 601 (Algorithms and Complexity)
- CS 101 (Computer Programming and Utilization, awarded best TA)
- CS 767 (Theoretical Machine Learning)
- CS 779 (Extremal Combinatorics)

Professional Experience

- As Quantitative Strategy Developer for around 3.5 years.
- As Data Scientist for around 1 year.
- As Software Engineer for around 6 months.

Courses Undertaken during PhD

Maths	Advanced Probability Theory
	Commutative Algebra
	Topics in Algebra (Tropical Algebraic Geometry).
Electrical	Random Graphs: Theory and Applications.
Computer Science	Formal Models for Concurrent and Asynchronous Systems
	Combinatorics.

Personal Details

D.O.B.	09^{th} December 1993
Sex	Male
Nationality	Indian
Marital Status	Married
Languages	English, Hindi