Vaibhav Krishan

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Personal email: vaibhkrishan@gmail.com

Official emails: vaibhkrishan@iitb.ac.in, vkrishan@cse.iitb.ac.in

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

EDUCATION

Doctoral Student Indian Institute of Technology Bombay 2017-Present

Computer Science CPI: 9.09/10

AND ENGINEERING

Bachelor of Technology Indian Institute of Technology Bombay 2009-2013

Computer Science CPI: 7.59/10

AND ENGINEERING Entrance Exam Rank: 22

Journal Publications

$\begin{array}{c} {\bf Algorithmica} \\ {\bf 2022} \end{array}$

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: Equiva-

lences 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.

SERVICE AND ENGAGEMENT

Reviewer | Computational Complexity Conference (CCC) 2024.

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. 09th December 1993

Sex Male
Nationality Indian
Marital Status Married
Languages English, Hindi