Siddhartha Jain

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Education

2020 - 2022 **MSc. in Computer Science**
École Polytechnique Fédérale de Lausanne (EPFL)

2016 - 2020 **BTech. in Computer Science & Applied Mathematics**
Indraprastha Institute of Information Technology (IIITD)

Publications

FOCS'21 (Invited to Special Issue) **Unambiguous DNFs and Alon-Saks-Seymour**

with Mika Göös (EPFL), Shalev Ben-David (UWaterloo), Robin Kothari (Microsoft Research), Kaspars Balodis (ULatvia)

In preparation **Communication Complexity of Collision**
with Mika Göös (EPFL)
We prove a polynomial lower bound for a natural two party version of the Collision problem: decide whether a given function is 2-1 or 1-1.

In preparation **Query analogues of TFNP**
with Mika Göös, Gilbert Maystre (EPFL), Alexandros Hollender (Oxford), Robert Robere, Ran Tao, William Pires (McGill)
We show new oracle separations for TFNP subclasses. We also show a new collapse that EOPL $=$ CLS$(=$ PPAD $\cap$ PLS$)$! Here is a talk by Mika on this project on Nov 22.

Projects

Unsupervised Preprocessing for Clustering
with Shay Ben-Elazar (Microsoft Research), Vincent Cohen-Addad (Google Research), Karthik CS (Rutgers)

Probabilistic & Interactive Proofs
with Alessandro Chiesa (UC Berkeley, EPFL)

Employment

2021-2022 **MSc. Research Scholar | EPFL**
Part of the Research Scholar program by the IC department, working with Mika Göös (EPFL).

2019 **Research Intern | ITCS Shanghai**
Summer intern with Bundit Laekhanukit (SUFE).

Honors & Awards

2021	Paper invited to SICOMP Special Issue of FOCS 2021
2021	MSc. Research Scholar (EPFL)
2020	Graduation with Honors (IIITD)
2019	Scholarship: Quantum Computation Winter school (IIAS)
2019	Scholarship: Data Science Summer school (IISc)
2019	Dean's list (IIITD)

Miscellaneous

Languages	**Hindi:** native **English:** fluent (written and spoken) **French:** some
Programming	Python, LaTeX, Java (some), scala (some)
Service	ICALP21
Coursework	Advanced Algorithms, Learning Theory, Probabilistic Methods in Combinatorics, Spectral Graph Algorithms, Computational Complexity, Information Theory & Coding, Cryptography & Security