

Education

- 2019–Present **Indian Institute of Technology, Bombay**,
Computer Science and Engineering, Ph.D, Advisor: Prof. Rohit Gurjar.
CGPA – 9.65*/10
- 2015–2019 **Indian Institute of Technology, Varanasi (BHU)**,
Computer Science and Engineering, B.Tech.
CGPA – 9.18/10

Publications

- Characterizing and Testing Principal Minor Equivalence of Matrices**,
with Abhranil Chatterjee, Sumanta Ghosh and Rohit Gurjar, [[arxiv](#)].
To appear at ACM Symposium on Theory of Computing (STOC) 2025.
- Fractional Linear Matroid Matching is in quasi-NC**,
with Rohit Gurjar and Taihei Oki, [[pdf](#)].
European Symposium on Algorithms (ESA) 2024.
- Border Complexity of Symbolic Determinant under Rank One Restriction**,
with Abhranil Chatterjee, Sumanta Ghosh and Rohit Gurjar, [[pdf](#)].
Computational Complexity Conference (CCC) 2023.
- A Deterministic Parallel Reduction from Weighted Matroid Intersection Search to Decision**,
with Sumanta Ghosh and Rohit Gurjar, [[pdf](#)],
ACM-SIAM Symposium on Discrete Algorithms (SODA) 2022.

Internships

- Jan-Feb 2025 **University of Bonn**, *Visiting PhD Student*, Supervision: Prof. László Végh.
- Jun-July 2024 **Keio University, Tokyo**, *Visiting PhD Student*, Supervision: Prof. Naonori Kakimura.
- May-Jul 2022 **IISc Bangalore**, *Visiting PhD Student*, Supervision: Prof. Siddharth Barman.
- May-Jul 2018 **Amazon Hyderabad**, *SDE Intern*.

Workshops Attended

- Mar 2023 **7th Workshop on Algebraic Complexity Theory (WACT)**, *University of warwick*, [[Talk link](#)].
- Dec 2022 **GIAN course on parameterized methods in randomized algorithms**, *IIT Gandhinagar*, Taught by:
Prof. Daniel Lokshtanov.

Teaching Assistantship

- IIT Bombay **Design and Analysis of Algorithms, Algorithms and Complexity, Topics in Computational Complexity, Applied Algorithms and Extremal Combinatorics.**
- NPTEL **Randomized Methods in Complexity.**

Miscellaneous

- Reviewer for FSTTCS, 2020.
- Selected for the Prime Minister Research Fellowship (PMRF) for PhD.
- Selected for the Kishore Vaigyanik Protsahan Yojna (KVPY) Fellowship.