

# Divyanshu Kumar BS-MS Mathematical Sciences

Indian Institute of Science Education and Research, Kolkata

https://midnight-koffee.github.io/

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Program	Institution/Board	Year	CGPA/%
BS-MS (Mathematical Sciences)	IISER-K	2018-23	7.53
Intermediate/+2	CBSE	2017	77.2%
Matriculation	CBSE	2015	10.00

#### **WORK EXPERIENCE**

#### • Program Intern | Lodha Genius Program

[May 2025 – June 2025]

- Served as Program Intern at the Lodha Genius Program (LGP), an initiative for high-performing students from grades
   9 to 12.
- Coordinated Teaching Assistants and supported academic delivery across multiple college-level courses.
- Helped conduct problem-solving sessions, explained concepts, and clarified doubts for students.
- Courses included:
  - \* Week 1: Fundamentals of Investing, Recurrences and Graph Theory, Linear Algebra
  - \* Week 2: Combinatorics, Differential Equations, Linear Algebra
  - \* Week 3: Estimates and Fermi Problems, Stochastic Processes
  - \* Week 4: Number Theory (Class 9-10), Mathematical Modeling

Teaching Fellow   Ashoka University	[Aug 2024 - May 2025]
<ul> <li>Probability and Statistics (Prof. Debapratim Banerjee)</li> </ul>	[Aug 24-Dec 24]
Statistical inference (Prof. Debapratim Banerjee)	[Jan 25- May 25]
o Calculus (Prof. Sarvesh Ravichandran Iyer)	[Jan 25- May 25]

## **PROJECTS**

•	MS	Proj	ect	l Prof	. Soum	alya	Joard	ar
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[Aug 2022 - May 2023]

- Studied DeRham cohomology of smooth manifolds
- Independent Study | Prof. Chiranjib Mitra

[Jan 2023 - May 2023]

- Studied Quantum Computation and Quantum Information book by Neilsen and Chuang.
- Summer Project | *Prof.* Saugata Bandhopadhyaya

[June 2021 - July 2021]

- Studied *Inverse* and *Implicit* function theorem
- Summer Project | Prof. Somnath Basu

[May 2021 - June 2021]

- Studied and presented Weierstrass Approximation theorem and generalized Stone Weierstrass theorem
- Winter Project | *Prof.* P.K Panigrahi

[Nov 2018 - Dec 2018]

• Read and presented the paper: Quantum Violation of Pigeonhole Principle and the nature of quantum correlations

#### RELEVANT COURSES

- Mathematics: Advanced Linear Algebra, Measure Theoretic Probability, Representation theory, Abstract Algebra, Graph Theory and Combinatorics, Topology, Complex Analysis, Functional Analysis, Measure Theory, ODE & PDE
- Computer Science: Programming and Data Structures, Natural Language Processing, Search Methods in Artificial Intelligence, Information Retrieval.

#### SCHOLASTIC ACHIEVEMENTS

• Qualified **Joint UGC-CSIR NET (JRF)** in Mathematics (AIR: 123)

[2023]

- Got All India Rank 1280 in *Graduate Aptitude Test in Engineering (GATE)* 2024 with Mathematics
- Got CERTI FICATE OF PROFICIENCY in *Qiskit Challenge India* organised by IBM.

[Sep 16,2020]

• Got CERTIFICATE OF QUANTUM EXCELLENCE in Qiskit Global Summer School organised by IBM.

[July 20-31, 2020] [2018]

• Qualified Joint Entrance Examination -Advanced.

### POSITIONS OF RESPONSIBILITY

• Teaching Assistant | Prof. Saugata Bandhopadhyaya

[Oct 2022 - March 2023]

Responsible for weekly tutorial of the course MA1101

• Department Representative | 18MS Batch

[Aug 2020 - May 2023]

• Responsible for communicating batch's feedback on various academic issues to higher authorities.

#### **SKILLS & INTERESTS**

• Programming Languages: C, Python, Javascript, Matlab, Arduino

• Tools & Libraries: Scipy, Matplotlib, Gnuplot, Qiskit, Numpy, Tensorflow LATEX

• Operating System: Windows, Linux

• Web Designing: HTML, CSS, JAVASCRIPT