

Vishal Bhardwaj

Curriculum vitae

Department of Mathematics
Louisiana State University
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🌐 vishalmath.github.io

Education

- 2023–2028 **Ph.D., Mathematics**, [Louisiana State University](#)
Advisor: [Prof. Gene Kopp](#)
- 2020–2022 **M.Sc., Mathematics and Computing**, [National Institute of Technology Manipur](#)
Thesis: Prime divisors in an arithmetic progression and explicit abc-conjecture
Advisors: [Prof. Shanta Laishram](#) (Indian Statistical Institution, Delhi Center)
- 2016–2019 **B.Sc., Mathematics**, [GD Goenka University, Gurugram, Haryana](#)
Thesis: A study of hypergeometric functions
Advisor: [Prof. Smita Sood](#)

Research Interest

Analytic Number Theory, Elliptic Curves

Teaching Experience

- 2022–2023 **Teaching Fellow**, [Plaksha University, Mohali](#)
- Spring 23 *FM 121*: Programming and Data Structures
- Fall 22 *FM 111*: Computational Thinking
My duties involve planning and completing the semester-long syllabus, guiding students with their programming assignments in the lab, conducting tutorials, and setting and grading quizzes for a class of 98 students.

Awards and Honors

- 2020 All India Rank 861/13186 at the Indian Institute of Technology Joint Admission test for Masters.
- 2019 Best co-curriculum activities award winner of the School of Basic and Applied Sciences at GD Goenka University.
- 2016–2019 Secured first rank in undergraduate studies at GD Goenka University
- 2016–2019 I was on the Dean's list for academic excellence at GD Goenka University.
- 2016–2019 Recipient of fully funded merit scholarship at GD Goenka University.

Publications

- Nov 2018 "Seasonal Variation with respect to Water Quality Index of Ghaggar River" (with Smita Sood, Perna Sharma, and Varsha Sharma). Available here [[pdf](#)].

Research Experience

- Summer 2018 **Intern**, *Indian Institute of Technology Guwahati*, Assam, India
Numerical Analysis for Ordinary Differential Equations
Supervisor: [Professor Natesan Srinivasan](#)
- 2017–2018 **Interdisciplinary Projects**, *GD Goenka University*, Gurugram, India
- Industrial Input Panel for Blind Operator.
 - Distance Measurement Instrument Using Ultrasonic Sensor in Arduino Uno.
 - Animated LED Cube.
 - Object Counter.
 - Smart Auditorium System.
 - Statistical Analysis of Categories of Bio-Medical Waste in India.
 - Forecasting of Electric Vehicle in India.

Summer Schools/Conferences/Workshops

- Mar 2023 **Southern Regional Number Theory Conference (Online)**, LSU.
- Nov 2022 **Bayou Arithmetic Research Days (Online)**, LSU.
- July 2022 **Formal Power Series & Algebraic Combinatorics (FPSAC)**, IISc Bangalore.
- June 2022 **L-functions, Circle-Method and Applications (Online)**, ICTS-TIFR.
- Dec 2020 **Applied Physics and Mathematics**, NIT Manipur.
- Nov 2020 **Recent Trends in Mathematics**, NIT Manipur.
- Oct 2020 **Technical Trends in Mathematics and its Applications**, NIT Manipur.
- Oct 2018 **Recent Developments in Science, Engineering, and Technology**, GD Goenka University.
- Oct 2017 **Recent Developments in Science, Engineering, and Technology**, GD Goenka University.
- Oct 2017 **International Computing and Communication Technologies for Smart Nation**, GD Goenka University.

Outreach

[Plaksha University, Mohali](#)

- Sept 22- July 23 **Admissions and Outreach**
My duties involved managing the students applications data.
- Nov- Dec 22 **Young Creators League**
My work is to communicate with the students and motivate them to do projects. I was also associated with checking the final project for the grand exhibition.

Leadership

- 2020-2022 Departmental Postgraduate Committee (DPPC) Member, NIT Manipur.
- 2020-2022 President of the Mathematics Society, NIT Manipur.
- 2021-2022 Placement Coordinator, Department of Mathematics, NIT Manipur.

Technical Skills

C/C++, Data Structures and Algorithms, MATLAB, \LaTeX

Grants

July 2022 Travel and living support for [FPSAC](#) at the *[Indian Institute of Science, Bangalore](#)*.

Community Service

2016-2020 I taught mathematics to underprivileged school students in my village.

Language Proficiency

Hindi, English - Fluent in spoken, written, and reading.

References

Available on request