

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

Teaching Fellow, [Plaksha University, Mohali](#)

- Summer 23 **FM 131**: Programming and Data Structures
- Spring 23 **FM 131**: 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.

Grants

- July 2022 Travel and living support for [FPSAC](#) at the [Indian Institute of Science, Bangalore](#) (INR 10248).

Publications and Preprints

- [1] "Seasonal Variation with respect to Water Quality Index of Ghaggar River" (with Smita Sood, Purna Sharma, and Varsha Sharma), November 2018. [[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.

Leadership & Service

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

Technical Skills

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

Outreach

Plaksha University, Mohali

2022 – 2023 **Admissions and Outreach**

My duties involved managing the student's applications and assisting with reports and data extraction.

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.

Community Service

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

Language Proficiency

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