

SHEETAL

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EDUCATION

University of Iowa, Iowa, USA

Jan 2024 - Present

PhD in Applied Mathematics and Computational Sciences, GPA: 4.33/4.0

Supervisors: Prof. Ann Campbell and Prof. Xi Luo

Purdue University, West Lafayette, Indiana, USA

Aug 2023 - Dec 2023

PhD in Statistics, GPA: 4.0/4.0

(Transferred to the University of Iowa in Jan 2024)

Indian Institute of Technology (IIT) Delhi, New Delhi, India

Jul 2014 - Jun 2016

MSc in Mathematics; CGPA: 9.25/10

Master's Thesis: Studied various methods and algorithms on the Irreducibility of Polynomials

Supervisor: Dr Ritumoni Sarma, Department of Maths, IIT Delhi

St. Stephen's College, University of Delhi, New Delhi, Delhi

Jul 2011 - Jun 2014

B.Sc. (Honors) in Mathematics; First Class Honors: 95%

- Prof. P.L. Bhatnagar Memorial Prize for being the Best student of Mathematics
- Dr. P.B. Bhattacharya Memorial Prize, for scoring the highest marks in UG Studies
- Best Student Award - Batch 2014

TEACHING ASSISTANT

- MATH1560: Engg Math II (University of Iowa)

Aug 2024 - Present

- STAT 301: Elementary Statistical Methods (Purdue University)

Aug 2023 - Dec 2023

- STAT 350: Introduction to Statistics (Purdue University)

Aug 2023 - Dec 2023

WORK EXPERIENCE

Tenured Assistant Professor in Department of Mathematics, University of Delhi, India

Jul 2018 - Present

- Taught core and elective undergraduate courses along with practical work using mathematical software, mainly focused in the areas of Real Analysis, Calculus, Multivariate Calculus, and Complex Analysis.
(Class Size taught: Approx. 50 students per batch)

Lecturer in Department of Sciences & Humanities, Pusa Institute of Technology, Delhi, India

Jul 2017 - May 2018

- Taught two core undergraduate courses in the area of Applied Mathematics

RESEARCH WORK & INTERNSHIPS

- **Summer Programme in Mathematics (SPM)**

May 2015 – Jul 2015

Selected for SPM organized by the Harish-Chandra Research Institute (HRI) Allahabad.

- **IASc- INSA- NASI Summer Research Fellowship Program**

May 2014 – Jul 2014

Project on study of Finite simple groups under the guidance of Prof I.B.S. Passi, IISER Mohali.

- **Mathematical Training and Talent Search Program (MTTS)**

May 2013 – Jun 2013

Selected for the O-level camp of MTTS in 2013, conducted by NBHM (National Board for Higher Mathematics) to teach mathematics interactively and to promote independent thinking in the subject.

AWARDS & ACHIEVEMENTS

- Awarded **Junior Research Fellowship** by the Council of Scientific & Industrial Research (CSIR) in 2017 for undertaking research work in the field of Mathematics for five years (2017-2022).
- Qualified **National Eligibility Test** with All India Rank 108, conducted jointly by CSIR and University Grants Commission (UGC) to determine the eligibility for teaching in Indian universities.
- Qualified **Graduate Aptitude Test in Engineering (GATE)** - 2018.
- Recipient of the **Singapore Stephanian Scholarship** for three consecutive years (2011-2014), awarded by the alumni of St. Stephen's College to only one student per year, for academic excellence and good writing skills.

Award value: SGD 800 per year

- Recipient of **Innovation in Science Pursuit for Inspired Research (INSPIRE) Scholarship** by the Department of Science and Technology, Govt. of India for five consecutive years (2011-2016) for being among the top 1% of class XII students at the national level. Award value: Rs. 80,000 per year for 5 years
- Winner of **Mathematics Quiz competition** organized by Mathematics Society of St. Stephen's College in its annual festival in 2013-14.
- Recipient of the **Best Student Award** for the academic year 2010 - 2011 by Hindu Vidyapeeth School for academic excellence and holding the highest leadership position (Head Girl) in the school.

TEACHER TRAINING PROGRAMS

- National Faculty Development Program on **Basics of Research and Issues in Plagiarism (An Interdisciplinary Approach)** organized by Guru Angad Dev Teaching Learning Centre, Ministry of Education, Govt. of India in August 2021.
- National Faculty Development Program on **Biostatistical & Mathematical Skills with Excel & R** (grade A+) organized by Guru Angad Dev Teaching Learning Centre, Ministry of Education, Govt. of India in August 2021
- Participated in a joint online teacher's Enrichment workshop on "**Differential Equations and its Applications**" organized by IIT Bombay and Tata Institute of Fundamental Research under the joint initiative of Indian National Science Academy and National Centre of Mathematics in March 2021
- **Refresher Course in Mathematics** organized by Teaching Learning Centre, University of Delhi under the aegis of Ministry of Education, Govt. of India in March 2021
- National Faculty Development Program on **Development of e-content & MOOCs in Four Quadrants** (grade A+) organized by Guru Angad Dev Teaching Learning Centre, Ministry of Education, Govt. of India in January 2021
- **National Faculty Induction Program** (grade A+) organized by Guru Angad Dev Teaching Learning Centre, Ministry of Education, Govt. of India in December 2020
- Workshop on **Data Manipulation and Visualisation through statistical software R** organized by Zakir Husain Delhi College, University of Delhi, under the aegis of DBT-Star College Scheme, Govt. of India in July 2020
- **National Faculty Development Program on Multimedia enriched e-content** (grade A+) organized by Guru Angad Dev Teaching Learning Centre, Ministry of Education, Govt. of India in May 2020

TECHNICAL SKILLS

- Proficient in mathematical software: Mathematica, MATLAB, Maxima
- Programming in SQL, C, C++, and R

VOLUNTEERING ACTIVITIES

- Mentor and advisor to the budding teachers of various states where I guide and help young aspirants with their preparation for competitive exams and interviews for teaching positions
- Member of SPSTI (Society for Promotion of Science and Technology in India), an NGO working for the cause of higher education and popularisation of STEM disciplines in India
- Teaching experience of one month in Summer school in Science and Mathematics for female students organized by SPSTI in Kurukshetra in June 2015
- Teaching experience of three years in evening classes organized by the Social Service League of St. Stephen's College under an initiative to provide education to poor and underprivileged students