CURRICULUM VITAE

Name: SOUVIK MANDAL   **Email: ma22d014@smail.iitm.ac.in**
Gender: Male
DOB: 27/04/1998

Academic Details:
1. **Currently** in 5th semester of PhD Mathematics programme at Indian Institute of Technology, Madras. Completed coursework with obtained CGPA: 10. Cleared comprehensive exam on 21st August, 2023.
   Date of Joining: 11/07/2022. Research Supervisor: Dr. Ramesh Kasilingam, Department of Mathematics, IIT Madras.
2. **Post Graduation (2019-2021)**-Master of Mathematics (M.Math), Indian Statistical Institute, Bangalore.
   Percentage: 90.65% (First Division with Distinction).
3. **Graduation(2016-2019)**- B.Sc (Mathematics Hons.), St.Xavier's College, Kolkata, West Bengal.
   Percentage: 77.11% (Major-Mathematics), 76.21% (Major & Anciallry). CGPA (all courses): 8.12 (Class I).
4. **Higher Secondary (2016) & Secondary (2014)**- Ramakrishna Mission Vivekananda Vidyamandir, Malda, West Bengal.
   Percentage: Higher Secondary-93.60%, Secondary-93.57%.

Research Interest: The study of manifolds in topology and geometry presents itself through four different classes of equivalence: homotopy equivalence, homeomorphism, PL homeomorphism and diffeomorphism. The classification of manifolds up to these equivalences is a fundamental question in geometry and topology. My interest is to understand smooth structures on high dimensional simply connected smooth manifolds up to diffeomorphism.

Projects:
1. Title:-"Classification of Smooth Abstract Manifolds of dimension ≤ 2"– M.Math 4th semester project.
   Guide: Dr. Ramesh Kasilingam, Department of Mathematics, IIT Madras. Co-guide: Dr. Anita Naolekar, S.M.U, ISI Bengaluru.
2. Title:-"A Brief Study on Quotient spaces"—B.Sc 6th semester dissertation. Guide: Prof. Rabiul Islam, Department of Mathematics, St.Xavier's College, Kolkata.

Qualified National Level exams:
1. Qualified Joint CSIR-UGC NET in 2022 with AIR 11 and GATE with AIR 536.
2. Qualified IIT JAM in 2019 with AIR 129 and M.Math admission test, 2019.

Achievements:
1. Selected for PMRF (direct entry) in cycle-9, 2022.
2. INSPIRE Scholar(2016-2021).
3. Secured 2nd position in a Paper presentation on –"Non-existence of sequence of continuous functions on $\mathbb{R}$ that converges pointwise to characteristic function of irrational" at seminar and workshop of 'Analytica' 2018 at St.Xavier's College, Kolkata, on 19th and 20th September 2018.
4. Secured 5th rank in the class of 45 students at the undergraduate level.

Summer projects(under INSPIRE scholarship scheme): Done project works on "A Brief Discussion on Topological Groups" (2022), on "Discrete Valuation Rings & Dedekind Domains" (on 2021), on "Kummer extensions, infinite Galois extensions & Transcendental extensions" (on 2020) and on "Splitting fields, Algebraic closure & Galois theory" (2019) under Dr Sujit Kumar Sardar, Department of Mathematics, Jadavpur University, Kolkata.

TA experience:
1. PMRF TA (June-Oct 2024) For An Introduction to Point-Set-Topology Part-II course at NPTEL. Course Instructor: Prof.Anant R. Shastri, retired Emeritus fellow of the Department of Mathematics, I.I.T Bombay. I have interacted with enrolled learners via weekly 2-hour live tutorial problem-solving sessions to clear their doubts and assist them in gaining a better understanding of course materials.
2. Institute TA (July-Nov 2024) for MA1101 (Calculus) under Dr. Ramesh Kasilingam, Department of Mathematics, IIT Madras.
3. PMRF TA (Jan-April 2024) For An Introduction to Point-Set-Topology Part-I course at NPTEL. Course Instructor: Prof.Anant R. Shastri, retired Emeritus fellow of the Department of Mathematics, I.I.T Bombay. I have interacted with enrolled learners via weekly 2-hour live tutorial problem-solving sessions to clear their doubts and assist them in gaining a better understanding of course materials.
4. PMRF TA (July-Oct 2023) For Algebra-I course at NPTEL. Course Instructor: Prof. S. Viswanath & Prof. Amritanshu Prasad, faculty at the Department of Mathematics, IMSc Chennai. I have interacted with enrolled learners via weekly 2-hour live tutorial problem-solving sessions to clear their doubts and assist them in gaining a better understanding of course materials.
5. PMRF TA (July-Oct 2023) For An Introduction to Point-Set-Topology Part-II course at NPTEL. Course Instructor: Prof.Anant R. Shastri, retired Emeritus fellow of the Department of Mathematics, I.I.T Bombay. I have interacted with enrolled learners via weekly 2-hour live tutorial problem-solving sessions to clear their doubts and assist them in gaining a better understanding of course materials.
6. PMRF TA (Feb-April 2023) for Basic Real Analysis course at NPTEL. Course Instructor: Prof. Inder K. Rana, an Emeritus fellow at the Department of Mathematics, I.I.T Bombay. I have interacted with enrolled learners via weekly 2-hour live tutorial problem-solving sessions to clear their doubts and assist them in gaining a better understanding of course materials.
7. Regular TA (Jan-April 2022) for An Introduction to Point-Set-Topology Part-I course at NPTEL. Course Instructor: Prof.Anant R. Shastri, retired Emeritus fellow of the Department of Mathematics, I.I.T Bombay. I helped enrolled learners to clear their doubts and assist them in gaining a better understanding of course materials.

Conferences/Workshop attended:
- "Dualities in Topology and Algebra" @ ICTS, Bangalore, May 15-26, 2023.
- "A Panorama of Geometry" @ IMSc, Chennai, November 20-25, 2023.
- "A Workshop on Symplectic Topology with Professor Yakov Eliashberg" @IMSc, Chennai, September 23-27, 2024.
- "The Strange and Wonderful world of Symplectic Geometry" @IIT Madras, Chennai, September 26, 2024.

Declaration: I affirm that the information given above is correct.
Date: October 30, 2024
Place: Chennai