Atanu Maji

ITER, Bhubaneswar, India

Ph. No-+91-9619083098 / 8249051354   Email- atanumajiofficial@gmail.com

EDUCATION

PhD in Operations Research   **2023-present**

Sapienza University of Rome

M.Sc. in Mathematics   **2014-2016**

Indian Institute of Technology Bombay

B.Sc. in Mathematics   **2011-2014**

Midnapore College, Vidyasagar University

TEACHING & ADVISING

Assistant Professor   **2016 - 2023**

Center for Data Science, ITER,

Siksha O Anusandhan Deemed to be University,

Bhubaneswar, Odisha-751030

RESEARCH INTEREST

Mathematical Modelling, Operations Research, Numerical Analysis, Mathematical Methods, Ordinary and Partial Differential Equations

RESEARCHEXPERIENCE

Publications:

- **Maji, Atanu. "**Pattern Formation from Reaction-Diffusion Equation Using Discretisation Method**", '**Lecture Notes in Mechanical Engineering', Spingers Book Series, 149-155, March'21.

- **Maity, S., Maji, A., Maity, K., Biswas, S., Garain, J, "**A Novel Approach for Active Event Based Video Summarization Using Foreground Analysis", International Journal of Engineering & Technology, 128-132, 2018.

Articles:

- A New Iterative Methods for System of Non-linear equations, SOA Deemed to be University.

- Encoding Numbers in RSA Cryptosystem, SOA Deemed to be University.

Conferences:

- Organizing committee member and participant of 1st International conference in **Applied Mathematics in Science and Engineering (AMSE-2019)** and International conference on **Numerical Analysis & Differential Equation** with Applications, 2019.
- Presented the paper titled "**RSA Algorithm using Marsenne Prime and Encoding Numbers in RSA Cryptosystem**" in the 2nd International conference in Applied Mathematics in Science and Engineering (AMSE-2022).

Projects:

Project Title : **Use of Finite Difference in Prey-Predator Model**
　Organization : **Indian Institute of Technology Guwahati** (Under the program of National Network for Mathematical and Computational
　Biology (NNMCB), **Indian Institute of Science(IISC), Bangalore.**
　Platform Used : MATLAB
　Contribution : Mathematical Model formulation, analysis and pattern formation
　Description : By using the finite difference method and discretizing the Holling-Tanner modelwe can draw the sketch of Prey-Predator Population changed by the changeof time and space.
　Supervisor : Prof. Siddharth P. Chakroborty, Dept. of Mathematics, IIT Guwahati

　Project Title : **Differentiator and Integrator**
　Organization : **Indian Institute of Technology Bombay**
　Platform Used : C++
　Contribution : Analysis and Coding
　Description : Writing the C++ code for checking differentiability of a function, integration and differentiation at any point, using fparser for input the functions.
　Supervisor : Prof. Deepak B Pathak & Prof. SupratikChakroborty

　Project Title : **C Programming for Numerical Methods**
　Organization : Midnapore College
　Platform used : C
　Supervisor : Dr. ManimohanMandal, Midnapore College

ACADEMIC ACHIEVEMENTS
- Secured **All India Rank-104, 280, 1475, 851**in Graduate Aptitude Test in Engineering in Mathematics **(GATE)-2016, 2017, 2021 and 2022** respectively.
- Secured **All India Rank -18** in Joint Admission Test for Masters in Mathematics **(IIT-JAM 2014)**.
- Scholar of **Innovation in Science Pursuit for Inspired Research(INSPIRE),** an innovative programme sponsored and managed by the Department of Science & Technology, **Ministry of Science & Technology, Govt. of India for 5 years.**

PROGRAMING SKILLS

　　Languages Learned: C, C++, FORTAN

　　Language Taught: Python

　　Tools: R, MATLAB, Latex

Certificate: Possessing a certificate in Information Technology Applications

WORKSHOP AND FACULTY DEVELOPMENT PROGRAM ATTENDED

- Faculty Development Program on **Emerging Trends and Applications of MachineLearning using Python**, Organized by Department of IT, Techno International New Town, 17-21st August 2023.
- National level short term training programme on **Statistical Machine Learning**, organised by Siksha O Anusandhan Deemed to be University, 7-11th August, 2023.
- Workshop on **Mathematical Modelling with Simulation in Applied Sciences**, organised by Central University of Haryana, 22-26th May, 2023.
- Online Lecture Series on **Nonlinear Dynamics and Applications** organized by the Department of Mathematics, Indian Instituteof Technology Indore, 13-16thFebruary, 2023.
- Short-term course on **Differential Equations: Solution Techniques and Applications**, organised by Indian Institute of Technology Guwahati, 7-12th September, 2020.
- Workshop on **Handling COVID-19 using AI/Machine Learning Techniques**, organised by Gandhi Institute for Education and Technology, 13-14th August 2020.
- Webinar on **Artificial Intelligence Emerging Future in Present Era**, organised by Department of Computer Science, Vivekananda College, 17th August, 2020.
- Workshop on **Meshfree and Multigrid Methods Applications to PDEs**, organised by Siksha O Anusandhan Deemed to be University, 27th November,2018.

COURSES TAUGHT

■Linear Algebra   ■ Calculus   ■ Introduction to Proofs ■ Number Theory

■Discrete Mathematics ■ Introductory Graph Theory ■ Programing in Python

SCHOLASTICS

- **M.Sc.** in Mathematics from **Indian Institute of Technology Bombay** in thefirst class, 2016.
- **B.Sc.** in Mathematics from Midnapore College, Vidyasagar University inthe first class, 2014.
- **12th** from MahammadpurDeshapranVidyapith with 83.8%marks in 2011.
- **10th** from MahammadpurDeshapranVidyapith with 83.125%marks in 2009.

PERSONAL DOSSIER

Date of Birth: 17/06/1993

Languages Known: English, Bengali, Hindi

Hobbies: Solving Sudoku, Travelling, Playing and watching football