# Rajarshi Dasgupta

## Research Interests

Physics Informed Neural Networks, Finite Element Methods, Graph Neural Networks, Complex Systems

## Experience

**December 2024** Organising Committee Member, CASML-2024, Indian Institute of Science (IISc), Bengaluru, India's first scientific machine learning conference, hosting up to 300 participants

October 2024 Presented a poster on 'Challenges with hp-VPINNs' at the Indo-German Workshop on Hardware-aware Scientific Computing (IGHASC)

May 2021 - May 2022 Research on a dynamical system exhibiting self organised criticality in the presence of random links under the guidance of Prof. Sudeshna Sinha at Indian Institute of Science Education and Research (IISER) Mohali

May-July 2018 Computational work on one dimensional maps, understanding dimensionality of fractals, learnt and implemented the 'small-world' network, studied spatio-temporal characteristics of coupled lattice maps under the guidance of Prof. Sudeshna Sinha

#### Education

**Ongoing M.Tech.** (Research) Pursuing my M.Tech.(Research) degree at the department of Computational and Data Sciences, **IISc** under Prof. Sashi Kumaar Ganesan with a CPI of 8.1/10.

Integrated BS-MS Physics Major and Data Science Minor at IISER Mohali with a CPI of 8.9/10.

Class 12 (2017) Completed in Kendriya Vidyalaya, IIT Kanpur (India) with an average of 93%.

#### **Publications**

• Dasgupta, R., Arun, A. & Sinha, S. Emergent activity networks in a model of punctuated equilibrium. Eur. Phys. J. Plus 137, 1366 (2022). https://doi.org/10.1140/epjp/s13360-022-03581-y

#### Skills

Programming Languages C, C++, Python, MATLAB

Software ATFX, shell scripting with basic UNIX programs including AWK scripting

## Personal Information

Languages Proficiency in English, Hindi and working aptitude in Bengali

Interests Theatre and literature