Rajarshi Dasgupta

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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 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 LATEX, shell scripting with basic UNIX programs including AWK scripting

Personal Information

Languages I speak Hindi, English and have an understanding of Bengali.

Interests Theatre and literature