

Rajarshi Dasgupta

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Research interests

Machine Learning, Physics Informed Neural Networks, Finite Element Methods, Complex Systems

Experience

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

June-July 2021 Teaching assistance for second year undergraduate course on Electrodynamics with instructor Dr. Abhishek Chaudhuri; took problem solving sessions and taught the integral and differential forms of the Maxwell's equations

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

PhD (Ongoing) Pursuing my PhD at the department of Computational and Data Sciences under the supervision of Prof. Sashi Kumar Ganesan

BS-MS Physics Major and Data Science Minor in IISER Mohali with a CPI of 8.9 out of 10. ¹

Class 12 Completed in Kendriya Vidyalaya, IIT Kanpur with an average of 93%. ²

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 L^AT_EX, 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

¹Cumulative Point Index up till November 2021

²Subjects : Physics, Chemistry, Mathematics, Computer Science and English