

Pranav M

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EDUCATION

Indian Institute of Science Education and Research, Pune

Maharashtra, India

BS-MS In Science (Interdisciplinary, Master's Thesis in Data Science)

2018–2023

- CGPA: 7.3

Kendriya Vidyalaya No.2 Kasaragod

Kerala, India

Class 12 in Science

2016–2018

- Score: 95.4%

RESEARCH EXPERIENCE

Exploring Random Walks on Networks: An analysis of Extreme Events

IISER Pune

Masters Thesis

June 2022-May 2023

- PI: Prof.M.S.Santhanam
- The Project focuses on exploring the evolution of extreme events on networks including Multilayer Networks using various random walk algorithms. The project utilised NetworkX and OSMnx

Climate Networks and Network Resilience

IISER Pune

Group Project at Data Science Department

Jan 2022-May 2022

- PI: Prof.Amit Apte
- The Project focuses on three aspects : Modeling Networks from Climate data, Theoretical Network Resilience , and applying Network Resilience to analyse real world Climate systems such as Indian Monsoon at various spatio-temporal scales. The project used pyunicorn package

Resilience of Dynamical Systems

IISER Pune

Project at Data Science Department

Aug 2021- Dec2021

- PI: Prof.Amit Apte
- The Project looked at the Mathematical and Conceptual Framework for Resilience in Dynamical Systems using both the Engineering and Ecological Resilience definitions, with focus also on Real World Systems

COURSEWORK

- **Mathematics:** Calculus, Linear Algebra, Real Analysis, ODEs, Probability, Statistics, Random Processes, Linear Programming, Inverse Theory, Graph Theory, Algorithms
- **Physics:** Introductory Classical Mechanics, Introduction To Quantum Physics, Non-Linear Dynamics, Statistical Mechanics
- **Biology:** Bioinformatics, Neuroscience, Ecology, Evolution, Biology of Systems, Mathematical & Computational Biology, Introductory Molecular & Cellular Biology
- **Social Sciences:** Economics & Public Policy, Development Studies, Political Philosophy, History Of Science, History of Architecture
- **Earth Sciences:** Introduction to Earth Sciences, Science of Climate Change
- **Data & Computer Science:** Introduction to Scientific Computing, Python, Data Science

SKILLS

Computational and Programming skills:

- Languages: Python, R, MATLAB
- Packages & Software: NetworkX, Gephi, Netlogo, OSMnx
- Mathematical, Algorithmic and Graphical Modeling

Soft Working skills:

- Have good Communication and Writing skills
- Excellent at working in teams
- Good at problem solving and resolutions

SCHOLARSHIPS AND AWARDS

- KVPY-SX Fellow, AIR:386 2018–2023
- Inspire Project Scholar 2016 Cycle

EXTRACURRICULAR ACTIVITIES

- Co-ordinator for Conclave, Karavaan 2019
Coordinated and organized a Panel discussion on Citizenship Rights and Immigration during IISER Pune's College Fest
- Editor, 98 acres, Kalpa 2020-2021
Part of a team investigation into the past and current perspectives on Humanities and Social Sciences at IISER Pune, within the framework of larger trends within Academia
- Volunteer at Abhyasika, DISHA 2018-2019
Volunteer at an educational NGO aimed at Education- development interventions for Middle and High school students near IISER Pune
- Volunteer at Spread the Smile(STS), DISHA 2019
Volunteered for Annual Educational Outreach program of DISHA for students in the rural regions of Pune District, Maharashtra
- Production Team Member, Sea Minor 2019
Participated as a Production Team Member for Sea-Minor, the Flagship program for Drama Club of IISER Pune