KRISHNADAS MOHANDAS

Doctoral Researcher & Young Physicist

@ krishnadasm96@gmail.com ✉ WUT, Faculty of Physics, Koszykowa 75 📍 Warsaw, Poland 🔗 krishnadasm96

EXPERIENCE

Research Assistant
Warsaw University of Technology

📅 Aug 2022 – ongoing 📍 Warsaw, Poland

- ALPHORN Project: Signed relations and structural equilibrium in complex systems: from data to models.
- Research Field: "Agent based modeling of stochastic systems." Supervisor: Prof. Janusz Hołyst

Teaching Assistant
Warsaw University of Technology

📅 Jan 2023 – ongoing 📍 Warsaw, Poland

- Physics Lab, Foundation year physics.

Research Assistant
IISER

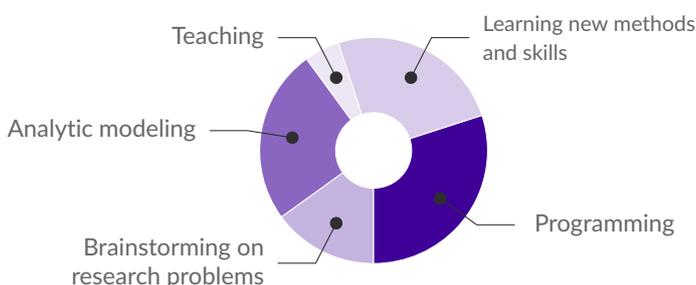📅 Nov 2020 – April 2022 📍 Tirupathi, India

- Recurrence Networks and Measures of financial data.
- Research Field: "Nonlinear Dynamics and Nonlinear Time Series Analysis" Supervisor: Prof. G. Ambika

PUBLICATIONS

📄 Journal Articles

- K. Mohandas, K. Suchecki, and J. A. Hołyst, "Critical properties of heider balance on multiplex networks," *Physical Review E*, vol. 109, no. 4, 2024. DOI: 10.1103/PhysRevE.109.044306.

- K. Mohandas, K. Harikrishnan, and G. Ambika, "Recurrence measures and transitions in stock market dynamics," *Physica A: Statistical Mechanics and its Applications*, vol. 608, 2022. DOI: 10.1016/j.physa.2022.128240.

- K. Mohandas, P. Saratchandran, and K. Harikrishnan, "Chaos in a cyclic three-species predator–prey system with a partial consumption of superpredator," *Pramana - Journal of Physics*, vol. 94, no. 1, 2020. DOI: 10.1007/s12043-020-1942-9.

A DAY OF MY LIFE

- Teaching
- Learning new methods and skills
- Analytic modeling
- Programming
- Brainstorming on research problems

EDUCATION

Ph.D. in Physics
Warsaw University of Technology

📅 Aug 2022 – ongoing

M.Sc. in Physics
Mahatma Gandhi University

📅 Aug 2016 – Aug 2018

B.Sc. in Physics
Mahatma Gandhi University

📅 July 20133 – June 2016

RESEARCH INTERESTS

Complex networks | Time Series Analysis
Complexity | Social dynamics

STRENGTHS

Modeling | Statistical analysis | Data Science
Scientific Computing | Agent based modeling

PROGRAMMING SKILL

Python ●●●●●
Matlab ●●●●○
R   ●●●○○
SQL   ●●○○○

LANGUAGES

English   ●●●●●
Malayalam ●●●●●
Polish   ●○●○○

GRANTS & SCHOLARSHIPS

- Research grants for young research and doctoral students of the Warsaw University of Technology in the discipline of Physical Sciences: 2023-2024
- ALPHORN - Polish-Swiss research project scholarship: 2022- 2024

REFEREES

Prof. Jnausz Hołyst

@ Warsaw University of Technology

✉ janusz.holyst@pw.edu.pl

WUT, Faculty of Physics, Koszykowa 75, 00-662 Warszawa

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Dr. Piotr Gorski

@ Warsaw University of Technology

✉ piotr.gorski@pw.edu.pl

WUT, Faculty of Physics, Koszykowa 75, 00-662 Warszawa

PRESENTATION

- DPG spring meeting, Dresden (SKM 2023) 26.03.2023-31.03.2023 Poster: Mean field approach for link coupling in Heider dynamics in bilayer network.

- Summer school: Lake Como School of Advanced Studies, Como, Italy – 22.052023 – 26.05.2023 Complex Networks: Theory, Methods, and Applications

- FENS 2023 & Max Born Symposium, Wroclaw 14.09.2023 – 16.09.2023 Oral presentation: Mean field solution for Heider balance in multilayer network.