


Format for Faculty Details for IGNOU Web site

	Name		Dr. Pawan Kumar
	Designation		Assistant Professor
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EDUCATIONAL QUALIFICATIONS			
Degree	Year	Institute/University	
Ph.D.	2020	Jamia Millia Islamia, New Delhi	
PG Diploma in Distance Education	2013	Indira Gandhi National Open University, New Delhi	
M.Sc. (Mathematics)	2008	Indian Institute of Technology Delhi, New Delhi	
B.Sc.(H.)	2006	Dayalbagh Educational Institute, Agra	
CAREER PROFILE			
<p>I have been in the teaching profession since 2008, just after the completion of my master's degree. I worked for three years in different colleges before joining IGNOU in 2011. Since then I have been teaching in IGNOU from certificate to research level. I have also been part of School Board of School of Sciences. I am currently involved in various committees of the school.</p>			
AREA OF INTEREST/SPECIALIZATION			
GRAPH THEORY, COMMUNITY DETECTION IN REAL WORLD NETWORKS			
ROLE AND RESPONSIBILITIES AT IGNOU			
<ul style="list-style-type: none"> Course coordination (MTE-05, MTE-10, MTE-13, MMT-001, MMTE-001, MMTE-004, BMTE-144) Contributed to the development of the courses MMTE-001 at PG level, and the course BMTE-133 and BMTE-144 at UG level Currently developing the course MMTE-004 at PG level Currently coordinating the research activities of Mathematics Discipline Group in the capacity of Research Programme Coordinator Teaching the course RMT-103 to Ph.D. (Mathematics) students 			
RESEARCH GUIDANCE			
Supervision of	Year of completion	Name	Ph. D. Topic

Books/Monographs (Authored/Edited)/ Book Chapter/ Lecture Notes :

- Kumar P., Dohare R. (2020) The Presence of Anti-community Structure in Complex Networks. In: Pant M., Sharma T., Basterrech S., Banerjee C. (eds) Computational Network Application Tools for Performance Management. Asset Analytics (Performance and Safety Management). Springer, Singapore. https://doi.org/10.1007/978-981-32-9585-8_13

Papers in Refereed/Peer reviewed Journals :

(1) Publications in International Journals:

- Kumar, P., Dohare, R. A neighborhood proximity based algorithm for overlapping community structure detection in weighted networks. *Front. Comput. Sci.* **13**, 1353–1355 (2019). <https://doi.org/10.1007/s11704-019-8098-0>
- Kumar, P., Dohare, R. Formalising and Detecting Community Structures in Real World Complex Networks. *J Syst Sci Complex* (2020). <https://doi.org/10.1007/s11424-020-9252-3>
- Kumar, P., Dohare, R. An interaction-based method for detecting overlapping community structure in real-world networks. *Int J Data Sci Anal* **14**, 27–44 (2022). <https://doi.org/10.1007/s41060-022-00314-3>

(2) Publications in National Journals:

CONFERENCES/SEMINARS/WORKSHOPS ORGANISED/PARTICIPATED

A. Conferences/Seminars/Workshops Organised/Participated :

- Participated in “Symposium on Network Biology” organised by the Centre for Computational Biology, IIIT-Delhi held on **28th October, 2017**.
- Given an invited talk on the topic “Analysis of Biological Networks using Igraph R package” in 8th Bioinformatics Seminar-cum-Hands-on-Training on “R Language & Drug Development” organised by the Bioinformatics Infrastructure Facility, Jamia Hamdard, New Delhi organised during **October 30-31, 2017**.
- Participated one day “National Seminar on Quality Assurance in Higher Education” organised by the Internal Quality Assurance Cell, JMI, New Delhi on **November 04, 2017**.
- Presented a research paper titled “The Presence of Anti-Community Structure in Complex Networks” in the international conference on Recent Advances & Applications in Computer Engineering (RAACE-2017) organised by St. Xavier’s College, Jaipur during **November 23-25, 2017**.
- Given an oral presentation in a one day symposium on Biophysics held on **November 20, 2018** in the Centre for Interdisciplinary Research in Basic Sciences, Jamia Millia Islamia, New Delhi
I have given an oral presentation in the National Conference on Complex Systems in Interdisciplinary Sciences organised by the Centre for Interdisciplinary Research in Basic Sciences, Jamia Millia Islamia, New Delhi during **March 11-12, 2019**.
- Presented a research article titled “जटिल नेटवर्कों में समुदाय संरचना को परिभाषित करना” in the national workshop on “उद्योग और पर्यावरण के लिए गणितीय विज्ञान में उभरते रुझान : तकनीकी हिंदी शब्दावली का प्रयोग ” organised by the Commission for Scientific and Technical Terminology in collaboration with Shaheed Bhagat Singh College, New Delhi during **January, 27-29, 2020**.
- Presented a research article titled “Detecting Community Structure with Pervasive Overlaps in Real World Networks” in the International Conference on Computational Sciences-Modelling, Computing and Soft Computing held online during **September 10-12, 2020** organised by the Department of Mathematics, NIT, Kerala.
- Presented a paper and actively participated in the “National Symposium on Mathematics” in the light of NEP 2020 and Indian Knowledge System held on **May 27-28, 2022**.

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