Faculty Profile

Name	: Dr. Samir Kumar Pandey
Designation	: Assistant Professor
Teaching Areas	: Engineering Mathematics
	Numerical Analysis
	Operations Research
	Discrete Mathematics
Research Areas	: Mathematical Modeling
	Epidemiology
	Population Dynamics
Education	: M. Sc. (Ranchi University, Ranchi), 2004
	Ph. D. (S 'O' A University, Bhubaneswar), 2013
	Post Doctorate (Politecnico di Torino (POLITO), Turin, Italy), 2015

JOURNAL PUBLICATIONS

1. Fuzzy epidemic model for the transmission of worms in computer network: Bimal Kumar Mishra, Samir Kumar Pandey, *Nonlinear Analysis: Real World Applications, Elsevier*, 11, 2010,pp. 4335-4341.
2. Dynamic Model of Worms with Vertical Transmission in Computer Network: Bimal Kumar Mishra, Samir Kumar Pandey, *Applied Mathematics and Computation*, *Elsevier*, 217, 2011, pp. 8438 - 8446.
3. Fuzzy e-epidemic SEIRS model for the transmission of worms in computer network: Bimal Kumar Mishra, Samir Kumar Pandey,*International Journal of Mathematical Modeling, Simulation and Applications,* 4(1), 2011, pp. 19 – 29.
4. A Distributed Time Delay Model of Worms in Computer Network: Samir Kumar Pandey,Bimal Kumar Mishra, P. K. Satpathy,*CiiT International Journal of Networking and Communication Engineering*, 3 (6), 2011, pp. 441 – 447.
5. Effect of anti-virus software on infectious nodes in Computer Network: A Mathematical Model, Bimal Kumar Mishra, Samir Kumar Pandey,*Physics Letters A, Elsevier*, 376, 2012, pp. 2389 – 2393.
6. Effect of Malicious Codes using Honeypot in Computer Network, Upendra Kumar, G Sahoo, Samir Kumar Pandey, *Rai J. Tech. Res. Innov*., 1 (1), 2013, pp. 23 – 28.
7. Dynamic Model of Worm Propagation in Computer Network, Bimal Kumar Mishra, Samir Kumar Pandey,*Applied Mathematical Modelling*, *Elsevier*, 38, 2014, pp. 2173 - 2179.
8. Attacking Behaviour of Computer Worms on E-Commerce Network: A Dynamic Model, Biswarup Samanta, Samir Kumar Pandey, International Journal for Research in Applied Science & Engineering Technology (IJRASET), 2 (XII), 2014, pp. 403 – 408.
9. Analysis of Virus Propagation in the Computer Network: S M Omair, Samir Kumar Pandey, International Journal of Computer System, 2 (3), 2015, pp. 63 – 66.
10. Dynamic Model on DDoS Attack in Computer network, Upendra Kumar, Samir Kumar Pandey Proceedings of International Conference on 'Informatics and Analytics (ICIA - 2016)' Pondicherry Engineering College (Technically Sponsored by ACM), AUG., 2016, pp. 1 – 5.

➢ **INTERNATIONAL CONFERENCE / SEMINAR**

1. International Conclave on 'Innovations in Engineering & Management (ICIEM 2013)' Birla Institute of Technology, Patna Campus, Patna, Feb. 22 – 23, 2013, "Dynamic Model on

Polymorphic Worms in Computer Network using Honeynet" –Upendra Kumar, G Sahoo, Samir Kumar Pandey, Bimal Kumar Mishra..

2. International Conference on 'Recent Trends in Computer Science Engineering (ICRTCSE - 2014)' Central University of Bihar, Patna (Technically Sponsored by IEEE Kolkata Section), Feb., 8 – 9, 2014, "Effect of Honeypots on Polymorphic Worms in Computer network" - Upendra Kumar, G Sahoo,Samir Kumar Pandey.

3. International Conference on Advances in Engineering and Technology ICAET – 2014,International Association of Engineering and Technology for Skill Development, Hyderabad, Dec., 17 – 18, 2014, "Attacking Behavior of Computer Worms on Ecommerce Network: A Dynamic Model" – Biswarup Samanta, Samir Kumar Pandey.

4. Third International Conference on Computing and Systems, ICCS – 2016, The University of Burdwan, Jan., 21 – 22, 2016, "Dynamic Model on DDoS Attack for Bots Delivery in E-Commerce Network" – Biswarup Samanta, Samir Kumar Pandey.

5. 50th International Conference on Current Advances in Electronics, Electrical and Computer Science (ICEECS), Institute of Research and Journals, Pune, Mar., 5 – 6, 2016, "Implementation of Fast Fourier Transform Using Verilog HDL" – Anup Tiwari, Samir Kumar Pandey.

6. International Conference on 'Informatics and Analytics (ICIA - 2016)' Pondicherry Engineering College (Technically Sponsored by ACM), AUG., 25 – 26, 2016, "Dynamic Model on DDoS Attack in Computer network" - Upendra Kumar, Samir Kumar Pandey.

NATIONAL CONFERENCE / SEMINAR

1. National Conference on 'Brain Storming Session on Cyber Attacks &Defense – 2009 (BSSCAD'09)', Orissa Engineering College, Bhubaneswar, Nov. 7 – 8, 2009 "Dynamic model of worms with vertical transmission in computer network" - Samir Kumar Pandey, Bimal Kumar Mishra.

2. 38th Annual Conference of Orissa Mathematical Society & National seminar on 'Role of Mathematics in Engineering & Technology' ITER, Bhubaneswar, Jan. 8 – 9, 2011 "E-epidemic Model of Worms with Random Coefficients in the Computer Network" - Samir Kumar Pandey, Bimal Kumar Mishra.

3. National Conference on 'Recent Developments in Mathematics and its Applications (NCRDMA, 2011)', SRM University, Chennai, Jan. 31 – Feb. 1, 2011, "SIRS e-epidemic model of worms with antivirus software and distributed time delay using vertical transmission in computer network" - Samir Kumar Pandey, Bimal Kumar Mishra.

4. National Conference on 'Mathematical and Statistical Modeling in Innovative Areas (mαstmiα, 2011)', Birla Institute of Technology, Mesra, Ranchi, Oct. 19 – 20, 2011, "Probabilistic e - epidemic model on computer worms" - Samir Kumar Pandey, Bimal Kumar Mishra.

5. National Conference on 'Mathematical and Statistical Modeling in Innovative Areas (mαstmiα, 2011)', Birla Institute of Technology, Mesra, Ranchi, Oct. 19 – 20, 2011, "Effect Of Quarantine & Vaccination On Nodes In The Computer Network" –Samir Kumar Pandey, Bimal Kumar Mishra.

6. National Conference on 'Mathematical Techniques and its Applications (NCMTA, 2012)', SRM University, Chennai, Feb. 8 – 9, 2012, "Information and the dynamics of SEIR e - epidemic model for the spreading behavior of malicious objects in Computer Network" - Samir Kumar Pandey, Bimal Kumar Mishra.

7. 1st Bi – Annual Conference of Jharkhand Society of Mathematical Sciences (JSMS), UGC, Academic Staff College, Ranchi University, Ranchi, Nov. 22 – 23, 2012, "Dynamical Model on Worm Transmission with Antivirus Software in Computer Network" - Samir Kumar Pandey, Bimal Kumar Mishra.

8. Zonal Seminar on 'Advances of Electronics, Information and Communication Technology in India', The IETE, Ranchi, Jul. 13 – 14, 2013, "E-epidemic Model on the Effect of Anti – virus Software on Computer Worms" - Samir Kumar Pandey, Bimal Kumar Mishra.

9. National Seminar in Convergence of Science & Technology (CST), Cambridge Institute of Technology, Ranchi, Feb., 19 – 20, 2016 "Spread of Malware within an E-Commerce Network with Quarantine: A Dynamic Model" - Biswarup Samanta, Samir Kumar Pandey.

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