

Faculty Profile

Faculty Name	Neeraj Gupta
Designation	Professor
Qualification	PhD(IT)
Email	neeraj.it@piet.co.in
Area of Interest	Adhoc Networks, Cloud Computing, Blockchains, IoT
Work Experience (Total)	23 Years
• Teaching	23 Years
• Research	15 Years
• Industry	NIL
• Others	NIL
Courses taught at Diploma/ Post Diploma/ Under Graduate/ Post Graduate/ Post Graduate Diploma Level	Statistical Mathematics for Computer Science, Cloud Computing, Data Structures, Computer Networks, Analysis and Design of Algorithms, Linux Operating System
Membership of Professional Bodies	ACM, IEEE, ISTE, CSI
Research Publications	15
• Research Papers UGC-CARE	05
• Research Papers SCOPUS	06
• Research Papers WoS/SCI/ABDC	04
• List of Publications	Attached as Annexure
Book and Chapter Publications	
• Books Authored published by International Publishers	01
• Books Authored published by National Publishers	Attached as Annexure
• Publication of Chapter in Edited Books	03
• Editor of Book by International Publishers	
• Editor of Book by National Publishers	
• Translation Work of Book	

<ul style="list-style-type: none"> List of Book and Chapter Publications 	Attached as Annexure
Patents	
<ul style="list-style-type: none"> Published 	04
<ul style="list-style-type: none"> List of published patent(s) 	
<ul style="list-style-type: none"> Filed 	
<ul style="list-style-type: none"> List of filed patent(s) 	Attached as Annexure
PhD Guidance	
<ul style="list-style-type: none"> Degree Awarded 	06
<ul style="list-style-type: none"> Thesis Submitted 	
M.Tech. Guidance	
<ul style="list-style-type: none"> Degree Awarded 	05
<ul style="list-style-type: none"> Thesis Submitted 	
Research Project	
<ul style="list-style-type: none"> List of Research project 	
Consultancy	
<ul style="list-style-type: none"> List of Consultancy 	
Awards & Honours	03
<ul style="list-style-type: none"> List of Awards & Honours 	Attached as Annexure
Invited lectures / Resource Person/ paper presentation in Seminars/ Conferences/full paper in Conference	23
<ul style="list-style-type: none"> International (Abroad) 	01
<ul style="list-style-type: none"> International (Within Country) 	20
<ul style="list-style-type: none"> National 	02
<ul style="list-style-type: none"> List of published papers 	
Organizing National Conference/ International Conference/ FDP/STTP	02
<ul style="list-style-type: none"> List of Conference/FDP/STTP committee 	Attached as Annexure
Social Contributions and Sports	

- | | |
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| <ul style="list-style-type: none">• List of Social Contributions and Sports | |
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LIST OF PUBLICATIONS IN JOURNALS

Prof. (Dr.) Neeraj Gupta

Information Technology

Panipat Institute of Engineering and Technology

Panipat

† Academic Identity:

🔗 Orcid ID: 0000-0002-9650-4988

🔗 Scopus Author ID: 57209931404

🔗 Google Scholar ID: M5qQOkIAAAAJ

🔗 Web of Science Researcher ID: ABH-2167-2020

Journals

1. Gupta, N. , Janani, S. , R, D. ., Hosur, R. ., Chaturvedi, A. ., & Gupta, A. . (2022). Wearable Sensors for Evaluation Over Smart Home Using Sequential Minimization Optimization-based Random Forest. *International Journal of Communication Networks and Information Security (IJCNIS)*, 14(2), 179–188. <https://doi.org/10.17762/ijcnis.v14i2.5499> (**Scopus CF: 2.4**)
2. Surabhi Sachdeva, Neeraj Gupta, Shalini Gambhir, “Simplifying Statistical Modeling for Infrastructure-as-a-Service Cloud Computing”, in Design Engineering (Toronto), Vol. 2021, Issue 9, 2021, pp. 1486-1504 (ISSN 0011-9342) (**Scopus CF:1.3**)
3. Roopsi Rathi, Neeraj Gupta, “Game Theoretic and Non-Game Theoretic Resource Allocation Approaches for D2D Communication”, in Ain Shams Engineering Journal, DOI: 10.1016/j.asej.2020.09.029 (**IF 1.949 SCIE**)
4. Khushboo Kalia, Neeraj Gupta, “Analysis of Hadoop Map Reduce Scheduling in Heterogeneous Environment”, in Ain Shams Engineering Journal, August 2020, DOI: 10.1016/j.asej.2020.06.009 (**IF 1.949 SCIE**)
5. Mukta, Neeraj Gupta, “Transform Free Modeling of Finite Buffer Non-Saturated IEEE 802.11 DCF in Ad Hoc Networks”, in International Journal of Wireless Information Networks, Vol. 27, No. 1, 2020, pp. 197-206, DOI 10.1007/s10776-019-00476-1 (ISSN-1068-9605) (**Cite Score 2.4 Scopus and ESCI**)

6. Mukta, Neeraj Gupta, “Analytical Approach towards Available Bandwidth Estimation in Wireless Ad-hoc Networks”, in *Wireless Networks*, 2020, pp. 1-26, DOI 10.1007/s11276-020-02249-8 (**IF 2.659 SCIE**)
7. Ashu Bansal, Neeraj Gupta, Rakesh Garg, “Fuzzy Multi-Criteria Decision-Making Approach for the Selection of Software Effort Estimation Model” accepted in *International Journal of Advanced Intelligence Paradigms*, 2019. (**Cite Score 0.8 Scopus**)
8. Mukta, Neeraj Gupta, “Analytical Available Bandwidth Estimation in Wireless Ad-hoc Networks Considering Mobility in 3-Dimensional Space”, in *Scalable Computing: Practice and Experience*, Vol. 20, No. 2, 2019, pp. 317-333. (ISSN 1895-1767; doi: 10.12694/scpe.v20i2.1525) (**Cite Score 1.2 Scopus & ESCI**)
9. Aakash Gupta, Neeraj Gupta, Ramesh Kumar, “Implementing Weighted Entropy-Distance Based Approach for the Selection of Software Reliability Growth Models”, in *International Journal of Computer Applications in Technology*, Vol. 57, No. 3, 2018, pp. 255-266 (ISSN: 0952-8091, 10.1504/IJCAT.2018.092990) (**Cite Score 2.2 Scopus & ESCI**)
10. Neeraj Gupta, C.S. Rai “Performance Evaluation of IEEE 802.11 DCF in Single Hop Ad Hoc Networks”, in *Wireless Personal Communications Journal*, Springer, Vol. 79, Issue 3, 2014, pp. 2171-2193 (ISSN:0929-6212; <https://doi.org/10.1007/s11277-014-1979-5>) (**SCIE IF:1.061**)
11. Mukta, Neeraj Gupta, “Bandwidth Estimation and Tools”, in *International Journal of Research*, Vol 4, Issue 13, 2017, pp. 1250-1265. (ISSN 2348-6848; UGC APPROVED JOURNAL Sr. No. 44396)
12. Neeraj Gupta, “A Review of Analytical Models Evaluating Performance of 802.11 DCF Networks”, in *International Journal of Engineering Research and Applications*, Vol. 7, Issue 9, September 2017, pp. 30-41. (ISSN 2248-9622; UGC APPROVED JOURNAL Sr. No. 4525)
13. Neeraj Gupta, “A Simplified Approach for Calculating Throughput in Ad hoc networks having Finite Buffer Size”, in *Journal of Innovation in Computer Science and Engineering*, Vol. 4, Issue 2, June 2015, (ISSN: 2278-0947)
14. Neeraj Gupta, C.S. Rai, “Bandwidth Estimation Problem & Solutions in IEEE 802.11 based Ad Hoc Networks”, in *International Journal of Computer Applications & Information Technology*, Vol. I, Issue III, November 2012, pp. 25-31 (ISSN: 2278-7720).
15. Sonu Mittal, Neeraj Gupta, “Auto Key Tester: Action-word Testing with a general-purpose keyword driven test automation framework”, in *International Journal of Engineering Research and Technology*, Vol. 3, Issue 2, February 2014 (ISSN: 2278 – 0181).

Patents:

1. Ankur Gupta, Vishal Suthar, Neeraj Gupta, et al., “An IoT Based System for Emergency Healthcare,” Indian Patent 202111049866 A, 12th November 2021.
2. Neeraj Gupta, Asha Sohal, Ashwani Kumar, et al., “Healthcare Cloud Based IoT and Machine Learning Enabled System for Detecting and Preventing Heart Disease Using Deep Learning,” Indian Patent 202111053226 A, 26th November 2021.
3. D. Srikanth, Neeraj Gupta, Asha Sohal, et al., “Effective Click Fraud Detection for Mobile App using Deep Learning, Python and Open-CV,” Indian Patent 202141053270, 03rd December 2021
4. Dr. K. Sivakumar, Dr. Neeraj Gupta, Dr. Dinesh Singh, “IoT with Artificial intelligence-based data authentication from end to end to cyber security of configuration using Deep Learning Techniques,” Indian Patent 202241023086, 06th May 2022.

Book:

- Neeraj Gupta, Bandwidth Estimation in Wireless Ad Hoc Networks, Lambert Academic Publishing, November 2018, p. 57 (ISBN 978-613-9-96506-9)

Book Chapter:

- Mukta, N. Gupta, “Available Bandwidth Estimation in Wireless Ad Hoc Networks: A Modified Approach”, in Communication and Computing Systems, Prasad et. al., Ed. London: Taylor and Francis, 2019, pp. 85-91 (ISBN 978-0-367-00147-6) DOI: <https://doi.org/10.1201/9780429444272>.
- Neeraj Gupta, Asha Sohal, “Cloud Computing: Evolution, Research Issues, and Challenges”, in Emerging Computing Paradigms: Principles, Advances and Application, Wiley, July 2022, pp 3-16, ISBN 978-1-119-81342-2. <https://onlinelibrary.wiley.com/doi/book/10.1002/9781119813439>
- Neeraj Gupta, “IoT Architecture and Design”, accepted in Internet of Things in Modern Computing: Theory and Applications, CRC Press

Conferences: 23

- Neeraj Gupta, C.S. Rai “A Survey of Quality of Service in Ad hoc Wireless Networks,” in International Conference on Advance Computing and Communication Technologies, APIIT, Panipat, 2007, pp. 346-349

- Neeraj Gupta, Mamta Sachdeva, “Available Bandwidth in MANETs: Terms, Estimation Techniques and Future Course,” in National Conference cum workshop on Information Security and Networks (ISAN), Chitkara University, Patiala, 19th June 2009.
- Neeraj Gupta, Mamta Sachdeva, “Network Monitoring: Topology, Methods and Issues”, in 4th National Conference on Computing for Nation Development, BVICAM, Delhi, 25th – 26th February 2010, (ISSN 0973-7529)
- Neeraj Gupta, C.S. Rai, “Estimating Available Bandwidth for IEEE 802.11 based Ad Hoc Networks”, in 4th International conference on Advance Computing Communication Technologies, technically sponsored by IEEE, APIIT SD INDIA, Panipat, 30th October 2010
- Neeraj Gupta, “Discussion on the Impact of Carrier Sense Range on Available Bandwidth for IEEE 802.11 based Ad Hoc networks”, in International Conference on Computational Intelligence and Information Technology, CIIT 2011, Springer, Pune, India, Nov 07-08, 2011, pp. 388-391. (ISBN 978-3-642-25734-6) (ISSN:1865-0929)
- Neeraj Gupta, C.S. Rai “Comparison of Analytical Models for Evaluating the Performance of IEEE 802.11 Distributed Coordination Function Under Saturated Conditions”, in International Conference on Advance Computing and Communication Technologies, ACCT-2013, Rohtak, April 2013, pp. 221-225. (ISSN: 2327-0632). DOI 10.1109/ACCT.2013.57
- Neeraj Gupta, C.S. Rai “Non- Saturation Throughput Analysis of IEEE 802.11 DCF Considering Short Retry Limit for Single Hop Ad Hoc Networks”, in Second International Conference on Future Generation Communication Technologies (FGCT-2013), London, IEEE, December 12-14, 2013.(ISSN: 2377-2638)
- Neeraj Gupta, C.S. Rai “New Analytical Model for Non-Saturation Throughput Analysis of IEEE802.11 DCF”, in Fifth International Conference on Advances in Communication, Network and Computing, Chennai, Elsevier, February 22-23 2014, pp. 66-76 (ISSN: 9789351071020) SearchDL ID: 03.AETS.2014.8.78
- Neeraj Gupta, C.S. Rai, “A Simple Mathematical Model for Performance Evaluation of Finite Buffer Size Nodes in Non-Saturated IEEE 802.11 DCF in Ad Hoc Networks”, in, Advances in Intelligent Systems and Computing, Volume 337, 2015, pp 505-512, CSI-2014, Springer, Hyderabad, 13-14th December 2014. (ISSN: 2194-5357)
- Surabhi Sachdeva, Neeraj Gupta, “Live Migration: Challenges and Solutions”, in International Conference on Computational Intelligence, Cyber Security and Smart Grid, IJERT, Vol. 5, Issue-10, April 2017, pp. 81-84. (ISSN 2278-0181)
- Kushboo, Neeraj Gupta, “A Review on Job Scheduling for Hadoop MapReduce”, in International Conference on Next Generation Computing and Information System, Jammu 2017, pp. 142-146, IEEE, doi: 10.1109/ICNGCIS.2017.40
- Roopsi Rathi, Neeraj Gupta, “A Review on D2D Communication with Game-Theoretic Resource Allocation Models”, in International Conference on Next Generation

Computing and Information System, Jammu 2017, pp. 142-146, IEEE, doi: 10.1109/ICNGCIS.2017.41

- Ashu Bansal, Neeraj Gupta, Rakesh Garg, “Hybrid Multi-Attribute Decision Making Approach: Extension of Distance Based Approach”, in Proceedings of International Conference on Automation and Computational Engineering, IEEE, 2018, pp. 164 – 167. (ISBN: 978-1-5386-5464-4)
- Surabhi Sachdeva, Neeraj Gupta, “Queueing Analysis of Migration of Virtual Machines”, In: Luhach, A.K., Singh, D., Hsiung, P.-A., Hawari, K.B.G., Lingras, P., Singh, P.K. (Eds.), Proceedings of Second International Conference on Advance Informatics for Computing Research (ICAICR-2018), Springer, July 2018, pp. 782-793, https://doi.org/10.1007/978-981-13-3140-4_70 (ISSN 1865-0929)
- Aakash Gupta, Neeraj Gupta, Rakesh Garg, Ramesh Kumar, “Evaluation, Selection and Ranking of Software Reliability Growth Models using Multi criteria Decision making Approach”, 4th International Conference on Computing Communication and Automation, 14-15 December 2018, pp. 1-8 (ISBN: 978-1-5386-6946-4)
- Mukta Airon, Neeraj Gupta, “Non-Saturated Heterogenous Mobile Ad-Hoc Network Throughput Analysis Considering Max Retry Limit and Max Contention Window Size”, in First International Conference on Secure Cyber Computing and Communications, National Institute of Technology, Jalandhar, IEEE, December 15-17, 2018, pp. 173-179. (ISBN: 978-1-5386-6373-8)
- Surabhi Sachdeva, Neeraj Gupta, “Effects of Different Queueing Models on Migration of Virtual Machines”, In: Wang, J., Reddy, G.R.M., Prasad, V.K., Reddy, V.S. (Eds.), Soft Computing and Signal Processing, Proceedings of International Conference on Soft Computing and Signal Processing, vol 2, Springer, 2019, pp. 233-241, https://doi.org/10.1007/978-981-13-3393-4_24 (ISSN 2194-5357)
- Aakash Gupta, Neeraj Gupta, Rakesh Garg, Ramesh Kumar, “Analysis of Software Reliability Models for Reliability Estimation”, 9th International Conference on Cloud Computing, Data Science and Engineering, 10-11 January 2019, pp. 355-358 (ISBN 978-1-5386-5933-5)
- Mukta, and Gupta, N. “Comparison of Transform Based and Transform-free Analytical Models having Finite Buffer Size in Non-saturated IEEE 802.11 DCF Networks”, In: Singh V., Asari V.K., Kumar S., Patel R.B. (eds) Computational Methods and Data Engineering. Advances in Intelligent Systems and Computing, vol. 1257, pp. 393-409 Springer, Singapore, 2021 https://doi.org/10.1007/978-981-15-7907-3_30
- R. Rathi and N. Gupta, "Device to Device Communication using Stackelberg Game Theory Approach," 2020 Research, Innovation, Knowledge Management and Technology Application for Business Sustainability (INBUSH), Greater Noida, India, 19-21 Feb., 2020, pp. 100-103, doi: 10.1109/INBUSH46973.2020.9392124.
- Kushboo, Neeraj Gupta, “An Overview of Data Locality Based Scheduler in Hadoop Map-Reduce Environment”, 2020 Research, Innovation, Knowledge Management and

Technology Application for Business Sustainability (INBUSH), Greater Noida, India, 19-21 Feb., 2020, pp. 96-99, doi: 10.1109/INBUSH46973.2020.9392178

- Roopsi Rathi and Neeraj Gupta, “Resource Allocation for Device-to-Device Communication in Three-Tier Network Using Stackelberg Game Theory”, in 2nd International Conference Advances in Applied Sciences, Engineering and Technology, K.R. Mangalam University, Gurugram, 20-21 May 2021.
- B. Ashreetha, D. G. V, H. Anandaram, N. B. A, N. Gupta and B. K. Verma, "IoT Wearable Breast Temperature Assessment System," 2023 7th International Conference on Computing Methodologies and Communication (ICCMC), Erode, India, 2023, pp. 1236-1241, doi: 10.1109/ICCMC56507.2023.10083511.

Achievement & Awards:

- Was awarded with the “Best Teacher” in Hindu College of Engineering by The Hindu Educational & Charitable Society, Sonapat in September’08.
- Was awarded with the “Best Senior Faculty” for academic year 2022-23 by Novel Research Academy, Puducherry, India, 01st November 2022.
- Was awarded with the “Best Senior Faculty” for academic year 2022-23 by D.K. International Research Foundation, India.

Organizing National Conference/ International Conference/ FDP/STTP

- Arranged and coordinated one-week faculty development program on “Cloud Computing using Windows Azure”.
- Convener, 2nd International Conference on Advances in Applied Sciences, Engineering and Technology, AASET-21, May 20-21, 2021
- Coordinator for one-week Faculty Development Program on “Artificial Intelligence and Machine Learning: Need of an hour”, 26th to 30th July 2021.