Dr. Navneet Kaur



Designation:

Assistant Professor

Specialization:

WIRELESS BODY AREA NETWORKS, WIRELESS SENSOR NETWORKS

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Biography:

Navneet Kaur is currently working as Assistant Professor in the department of Computer Science and Engineering at Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib in Punjab (INDIA). She has earned Ph.D. in Computer Engineering and holds a Master's Degree, with distinction in Computer Science from Panjab University, Chandigarh. She has more than eighteen years of experience in teaching and research both at UG/PG levels. She has guided many Theses in M.E. Cyber Security and M.E. Computer Science and Engineering. She has more than 15 research publications in reputed peer reviewed journals and conferences. She is member IEEE and Branch Counselor, IEEE Student Chapter at Baba Banda Singh Bahadur Engineering College. She is Coordinator, Research and Development Cell of CSE Department at Baba Banda Singh Bahadur Engineering College. She has organized various Workshops, Seminars and Technical Events at college level.

Research Tags

Wireless Body Area Networks

Wireless Sensor Networks

Wireless networks

Routing algorithms

Membership of Professional Institutions, Associations, Societies

* Professional Member IEEE
* Member ACM
* Life Member CSI

#### Publications

1. Kaur T, Kaur N, Sidhu G. Cost Based Routing Protocols in WBAN: a Review. International Journal of Computer Sciences and Engineering.2018; 6(7): 1185-1193. doi:10.26438/ijcse/v6i7.
2. Singla R, Kaur K. Compressed and Secure Energy Efficient Routing Protocol for WBAN. International Journal of Computer Sciences and Engineering. 2018; 6(7): 252-258. doi.org/10.26438/ijcse/v6i7
3. Gurbeer Kaur and Navneet Kaur. Cost Effective Energy Efficient and Secure Routing Protocol (CESR) for WBAN. International Journal of Computer Applications 169(4):37-43, July 2017.
4. Navneet Kaur, Sukhwinder Singh, “Enhanced Quality of Service aware Routing protocol for Delay sensitive data in Wireless Body Area Networks”, Submitted to Ad Hoc Networks, Elsevier, Impact Factor: 3.06 (SCI Indexed)
5. Tamanna Puri, Rama Krishna Challa, and Navneet Kaur Sehgal, “Energy-efficient Delay-aware Preemptive Variable-length Time Slot Allocation Scheme for WBASN (eDPVT),” 11th August, 2015, Fourth International Conference on Advances in Computing, Communications & Informatics (ICACCI) Special Session on Energy Efficient Wireless Communications and Networking, Kochi, India, vol. 4, pp. 966-972, ISBN: 978-1-4799-8791-7, doi: 10.1109/ICACCI.2015.7275736
6. Navneet Kaur, Sukhwinder Singh, “Optimized cost effective and energy efficient routing protocol for wireless body area networks”, Ad Hoc Networks, Elsevier, 61 (2017) 65-84. doi:10.1016/j.adhoc.2017.03.008, Impact Factor: 3.06 (SCI Indexed)
7. Tamanna Puri, Rama Krishna Challa, and Navneet Kaur Sehgal, “Energy Efficient QoS Aware MAC Layer Time Slot Allocation Scheme for WBASN,” 11th August, 2015, Fourth International Conference on Advances in Computing, Communications & Informatics (ICACCI) Special Session on Energy Efficient Wireless Communications and Networking, Kochi, India, vol. 4, pp. 966-972, ISBN: 978-1-4799-8791-7, doi: 10.1109/ICACCI.2015.7275736
8. Navneet Kaur and Sukhwinder Singh, “Thermal Aware Routing protocols in WBAN: A Survey”, February 23-24, 2013, International Conference on Soft Computing, Artificial Intelligence, Pattern Recognition, Biomedical Engineering and Associated Technologies (SAP-BEATS 2013), J.N.V. University, Jodhpur.
9. Navneet Kaur and Sukhwinder Singh, “A review of Wireless Body Area Networks for Medical Applications”, February 26-28, 2012, Chandigarh Science Congress (CHASCON 2012), Panjab University, Chandigarh
10. Navneet Kaur, Kalpna Verma, “*WSAN: An Innovative approach to Wireless Technology”*, 18-20th February 2010, TheInternational conference on ‘Engineering Innovations: A Philip to Economic Development’, Continental Institute of International Studies, Fatehgarh Sahib.
11. Navneet Kaur, “Traffic Analysis Tools-Introduction, Challenges and Limitations “, 1st All India National Conference on Challenges in Emerging Computing Technologies (CECT’10) at RBIEBT, Mohali on 08-09 April 2010.
12. Navneet Kaur, Kalpna Verma, “*Evolution of 4G Technology in Mobile Computing: Vision, Perspective & Comparison with earlier generations”*, 18-20th February 2010, TheInternational conference on ‘Engineering Innovations: A Philip to Economic Development’ , Continental Institute of International Studies, Fatehgarh Sahib.
13. Kalpna Verma , Navneet Kaur, “Wireless Access Technologies in 2G and 3G Standards”, 1st All India National Conference on Challenges in Emerging Computing Technologies (CECT’10) at RBIEBT, Mohali on 08-09 April 2010.
14. Navneet Kaur, C. Ramakrishna, *Performance Evaluation of S-Mac protocol*, 18-19th October 2008, TheInternational conference on ‘Wireless network and Embedded System ‘WECON-2008’, Chitkara Institute of Engineering & Technology, Rajpura.
15. Navneet Kaur, C. Ramakrishna, *S-MAC – an Overview,* 26th May 2007, The International Conference on IT Cognizance-2007, Canadian Institute for International Studies, Fatehgarh Sahib, Punjab.
16. Navneet Kaur, C. Ramakrishna, *Overview of Wireless Sensor Networks,* 11-12th January 2007, National conference on Emerging Trends in wireless communication and E-Security WCES-2007, UIET, Punjab University, Chandigarh.
17. Navneet Kaur, C. Ramakrishna, Overview of Mobile IP, National Conference on computer Science & Information Technology NCCSIT, 18th-19th March 2006, BBSBEC Fatehgarh Sahib, Punjab.
18. Navneet Kaur, C. Ramakrishna, Mobile IP, National Conference on Information and Emerging Technologies, 18th-19th February 2006, IET Bhaddal, Punjab.
19. Navneet Kaur, S.S.Sehgal, *Robotics in Practice- Technology and Applications*, National Seminar & Academia – Industry Interface, 14th-16th March 2003, MMEC Mullana (Ambala), Haryana

Research Experience

1. **Research Scholar** in the Computer Science and Engineering Department, UIET, Panjab University, Chandigarh from the year 2011 to 2014.

Awards and Honours

* **Received Certificate for Appreciation** for High Impact factor publication of the year 2017 from UIET Panjab University, Chandigarh.
* **Chaired Technical session** in International Conference on “Futuristic Trends in Computing and Networking (ICFTCN-2018) on 3rd April, 2018 at Chandigarh University, Gharuan (Mohali), Punjab.
* **Silver Medalist** in M.E. degree in the year 2007 from Punjab University, Chandigarh
* Received certificate of excellent performance in Coordination of **IIM CAT 2009** Examination held from Nov 28th – Dec 7th.
* **Best Technical paper award** at an International Conference ‘WEBCOM-08’ from 18-19th October 2008 at CIET, Rajpura.
* **Received Certificate of Appreciation** for Stage Anchoring during successful organization of TEQIP Sponsored 3rd International Conference on “Biomedical Engineering and Assistive Technologies (BEATS-2014) from 14th -15th February 2014 organized by UIET, Panjab University, Chandigarh.
* **Received Certificate of Appreciation** for valuable contribution to Editorial Committee during successful organization of TEQIP Sponsored 3rd International Conference on “Biomedical Engineering and Assistive Technologies (BEATS-2014) from 14th -15th February 2014 organized by UIET, Panjab University, Chandigarh.
* **Received Certificate of Appreciation** for successful conduct of one week FDP on “Cyber Security and Big Data Analytics” from 26th February- 2nd March 2018 organized by BBSBEC, Fatehgarh Sahib.
* **Received Certificate of Appreciation** in recognition of publishing a paper titled “Optimized cost effective and energy efficient routing protocol for wireless body area networks” in SCI/SCIE indexed journal Ad Hoc Networks, Elsevier with an impact factor of 3.06 in the academic year 2017-2018.
* **Co-convener** for two day All India Seminar on Recent Innovations in Wireless Communication and Networking from 23rd -25th Feb 2017 at BBSBEC, Fatehgarh Sahib.
* **Organized FDP** on Cloud Computing-Applications and Issues from 4th -8th July 2016 at BBSBEC, Fatehgarh Sahib
* **Delivered an Expert Talk** on “Effective Technical Writing using LaTeX” at Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib at an STC from 3rd -7th July 2017.
* **Delivered an Expert Talk** on “Mobile IP and Wireless TCP” at NITTTR, Chandigarh at an STC on 26th July 2006

#### Description of Research Interests

COMPUTER NETWORKS/MOBILE & WIRELESS NETWORKS