CURRICULUM VITAE

1. Name **: Akashdeep**

2. Designation : Assistant Professor

3. Department : Computer Science and Engineering

4. Address : Room # 212, Academic Block # 1,
UIET, Panjab University, Sector-25, Chandigarh (UT) -India
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Residential: H.No 977, Sector 70, Mohali, Punjab

5. Educational Background:

Examination	University/Board	Year
Ph.D. (Computer Science & Engineering)	Guru Nanak Dev University, Amritsar	2015
M. Tech. (Computer Science & Engineering)	Punjabi University Patiala	2005
B.Tech (Computer Science & Engineering)	Punjab Technical University, Jalandhar, India	2002

6. Research Areas : Wireless Networks, Soft Computing, Video Analytics

7. Experience : 12 + Years Teaching and Research

8. Teaching Subjects : Compiler Design, Data Structure & Algorithms, Object Oriented Programming, Operating Systems, Programming C/C++, Soft Computing.

9. Sponsored Projects/Consultancy Work:

10. Extension and Research Interaction:

- Chaired 5+ sessions in various National and International conferences
- Invited talks (10+) on different occasion at various institutes of Punjab, Haryana and Chandigarh.
- Attended number of training programmes at Panjab University, Guru Nank Dev University Amritsar etc.
- Coordinating faculty development programme on Machine Learning and Pattern Recognition
- Conducted course on Machine and Deep Learning

11. Selected List of Publications:-

International Journals

- **Akashdeep,** ishfaq Manzoor, Neeraj, " A feature reduced intrusion detection system using ANN classifier" Expert Systems with Applications, Elsevier, **IF 3.928, SCI Indexed**, Vol 88, 2017, 249-257.

- Manisha Kaushal, Baljit Singh, **Akashdeep,** "Performance evaluation of fuzzy 2-partition entropy and big bang big crunch optimization based object detection and tracking approach"

Multidimensional Systems and Signal Processing, Springer, **IF.1.365, SCI Indexed**, Online, August 2017. Available at :- https://link.springer.com/content/pdf/10.1007%2Fs11045-017-0515-7.pdf

- Manisha Kaushal, Baljit Singh, **Akashdeep,** "Water cycle algorithm based multi-objective contrast enhancement approach", Optik - International Journal for Light and Electron Optics, **IF : 0.835**, SCI Indexed. June 2017
- **Akashdeep,** Manisha Kaushal, Baljit Singh, "Proposal and Evaluation of a Fuzzy Logic-Driven Resource Allocation Mechanism" International Journal of Fuzzy Systems, **IF: 2.158**, SCI Indexed, Vol. 19 (2), (2017) Available at : https://link.springer.com/article/10.1007/s40815-016-0185-x
- **Akashdeep,** K. S. Kahlon, Manisha Kaushal, "Analysis of a queue length aware and latency guarantee fuzzy-based adaptive resource allocator for WIMAX networks", Optik - International Journal for Light and Electron Optics, Available online 17 October 2015. **IF : 0.835**, SCI Indexed. Available at:- http://www.sciencedirect.com/science/article/pii/S0030402615014448
- **Akashdeep,** K.S. Kahlon, Harish Kumar, "Survey of scheduling algorithms in IEEE 802.16 PMP networks", Egyptian Informatics Journal, Elsevier Publication, 2014 vol 15, No. 1, pp 25-36. Available at:- http://www.sciencedirect.com /science/article/pii/S1110866513000509.
- **Akashdeep,** K.S. Kahlon, "An Embedded Expert System for Adaptive WFQ Scheduling of IEEE 802.16 networks", Elsevier Journal of Expert System with Applications, 2014, vol 41, No. 16. **IF : 3.928,** SCI Indexed. Available at:- http://www.sciencedirect.com/science/article/pii/ S0957417414003352.
- Akashdeep, K. S. Kahlon, *"A Neural Based Proposal for scheduling of IEEE 802.16 networks"*, International Journal of Engineering and Technology, 2012, Vol. 4, No 5, pp 328-332. Available at :- http://www.scopus.com/record/display.url?eid=2-s2.0-4869795844&origin=resultslist &sort=plff&src=s&st1=0975-4024.
- Akashdeep, K.S. Kahlon, *"An Adaptive Weight Calculation based Bandwidth Allocation Scheme for IEEE 802.16 Networks",* Journal of Emerging Technologies in Web Intelligence, Academy Publisher 2014, Vol 6. , No. 1 pp 142-147. Available at:- http://www.scopus.com/record/display.url?eid=2-s2.0-84896540950&origin=resultslist&sort= plf-f&src=s&st1=1798-0461.
- Akashdeep, K. S. Kahlon, "A queue based algorithm for scheduling in IEEE 802.16 networks", *International Journal of Advance Research in Computer Science and Software Engineering*, vol 2, No. 7, July 2013.

- Akashdeep, G. Singh, "Priority based uplink scheduler for IEEE 802.16 networks" *International Journal of Computer Science and Engineeering*, vol 3, issue 6, 2012.
- M. Mahajan, Akashdeep,"Steganography in Colored Images Using Information Reflector with 2^k Correction", *International Journal of Computer Applications* ,2012

Book Chapters

- **Akashdeep, "**Quality of Service Analysis of Fuzzy Based Resource Allocator for Wimax Networks", S.C. Satapathy et al. (eds.), Emerging ICT for Bridging the Future − Volume 2, 157 Advances in Intelligent Systems and Computing 338, Springer International Publishing Switzerland 2015, ISBN 978-3-319-13727-8 ISBN 978-3-319-13728-5 (eBook), pp DOI: 10.1007/978-3-319-13731-5_18
- **Akashdeep**, "Bandwidth Allocation Scheme in Wimax Using Fuzzy Logic", S.C. Satapathy et al. (eds.), Emerging ICT for Bridging the Future − Volume 1, Advances in Intelligent Systems and Computing 338, Springer International Publishing Switzerland, 2015, ISBN 978-3-319-13730-8 , ISBN 978-3-319-13731-5 (eBook), pp 157-163 DOI: 10.1007/978-3-319-13728-5_40
- Akashdeep, "Fuzzy Based Quality of Service Analysis of Scheduler for WiMAX Networks", Information System design and Intelligent Applications, Springer International Publishing Switzerland, 2015, Volume 1, pp 667-674, Editors:- J. K. Mandal, Suresh Chandra Satapathy, Manas Kumar Sanyal, Partha Pratim Sarkar, Anirban Mukhopadhyay, Online ISBN 978-81-322-2250-7, Print ISBN 978-81-322-2249-1
- Akashdeep, K.S. Kahlon, *"WiMAX in Education: Designing a wireless networking lab"*, Proceedings of International Conference on Transformations in Engineering Education 2014. Available at:- **http://www.springer.com**/engineering/book/978-81-322-1930-9.
- Akashdeep, "A Fuzzy Computationally Intelligent System for Resource Allocation in WiMAX", LNCS 8956, Distributed Computing and Internet Technology, Editors: Natarajan, Raja, Barua, Gautam, Patra, Manas Ranjan pp. 257–260, 2015. Springer International Publishing Switzerland 2015, pp 257-261. ISBN 978-3-319-14977-6.
- Akashdeep, "Intelligently Modified WFQ Algorithm for IEEE 802.16 Resource Allocations", Proceedings of First International Conference on Information and Communication Technology for Intelligent Systems: Volume 2, Editors: Satapathy, Suresh Chandra, Das, Swagatam (Eds.), Smart Innovations Systems and Technologies, Springer International Publishing, 2016, ISBN 978-3-319-30927-9, pp 115-124
- Akashdeep, "Fairness and Performance Evaluation of Fuzzy Based Resource Allocator for IEEE 802.16 Networks" Annual Convention of Computer Society of India, New Delhi, Accepted 2015.

International Conferences

- Akashdeep, "A survey of Evolution of IEEE 802.16 certificate and Standardization", 4th International conference on Innovations in Computer Science and Engineering(ICICSE-2016), July 22-23, 2016, Guru Nanak Institute of Technology, Hyderabad, India.
- Akashdeep, "Implementation of Fuzzy Logic Scheduler for WiMAX in Qualnet", 4th International conference on Innovations in Computer Science and Engineering(ICICSE-2016), July 22-23, 2016, Guru Nanak Institute of Technology, Hyderabad, India.
- Akashdeep, "Fairness analysis of Fuzzy Adaptive Scheduling Architecture", 4th International conference on Innovations in Computer Science and Engineering(ICICSE-2016), July 22-23, 2016, Guru Nanak Institute of Technology, Hyderabad, India.
- Neeraj Kumar, Akashdeep, "A comprehensive Analysis of Moving Object Detection Approaches on moving camera", 4th International conference on Innovations in Computer Science and Engineering(ICICSE-2016), July 22-23, 2016, Guru Nanak Institute of Technology, Hyderabad, India.
- Akashdeep, "An adaptive scheduling ploy for WiMAX networks" 18th Punjab Science Congress , Desh Bhagat University, Mandi Gobindgarh,2014
- Akashdeep, "Advancements in Information Technology", National Symposium on Advancements in IT, Ludhiana, 2015.
- Manisha Mahajan, Akashdeep, "Data Hiding in Coloured images using Arbitrary Channel as Information Reflector", 5th International Conference on Downtrend Challenges in IT, PCTE Ludhiana. 2010
- Mohit Kumar, Akashdeep, Sushil Kumar,"Testability Factor for Aspect oriented Programs" International Symposium on computer Engineering and technology, RIMT-IET Mandigobindgarh. ISBN : 978-81-910304-0-2, 2010,pp:-163-166
- Gaurav Garg, Sakshi Kaushal, Akashdeep, " Study on Manets Network Layer Attacks" 4th IEEE International Conference on Computing, Communication and Networking Technologies. 4th - 6th July 2013, Vivekananda College of Engineering for Woman , Tamilnadu.
- Mohit Kumar, Akashdeep, "A study of Aspect Oriented Testing techniques" 5th International Conference on Downtrend Challenges in IT, PCTE Ludhiana, 2009.

Membership and others:

- Board of Studies in CSE of Panjab University Chandigarh
- Member Faculty of Engineering, Panjab University Chandigarh
- Member of IE(I)

- Life Member of Computer Society of India
- Life member of Indian Society for Technical Education
- Life member of International Association of Engineers
- Member of various departmental committees like Academic, Technical Committee, Research Monitoring Committee etc.

12. Language Proficiency: Hindi, Punjabi, English

13. Research Students:

Phd

S.N	Name	Completion Year	Topic
1	Kamaljit Kaur	2016 (Enrolled), JRF	---
2	Pankaj Kumar	2016 (Enrolled)	----
3	Payal	2017(Enrolled), JRF	

M.E/M.Tech

S.N.	Name	Completion Year	Topic
1	Navneet Kaur	2008	A study of various Object oriented metrics
2	Mohit Kumar	2010	Testablity Factor for Aspect Oriented Techniques
3	Manish Mahajan	2010	Image Stegnography with 2(k) correction
4	Gurpreet Singh	2011	Design and Implementation of WiMAX Scheduler
5	Gaurav Garg	2013	Survey of wormhole attacks on MANETS
6	Neha Bangar	2013	Image Segmentation in CT images
7	Pallivi Grover	2014	Proposal for scheduling of nrtPS traffic for IEEE 802.16 networks
8	Pankaj Singla	2015	Underwater moving object detection
9	Ishfaq	2015	A neural based feature reduced intrusion detection system
10	Neeraj	2017	Moving Object Detection in Moving camera
11	Naman	Enrolled	Deep learning based solution for shadow detection in vehicular traffic
12	Navpreet Kaur	Enrolled	A deep learning based Lung segmentation approach
13	Lavisha	Enrolled	

Current Areas of Research:

Working in the area of Machine Learning, Deep Learning and soft computing for

- Effective delivery of services in Wireless Networks
- Intrusion Detection for Wireless/IoT Networks
- Performance evaluation and resource allocation to various applications in wireless networks
- Moving object detection and tracking in videos
- Traffic sensing and classification

(AKASHDEEP)