

Brief Profile

Name	: Dr. Ajay Kumar Singh
Date of Birth	: 04 Dec. 1974
Educational Qualification	
• <i>Ph.D.</i>	: Jaypee University of Information Technology (SDR)
• <i>M.Tech</i>	: Sam Higginbottom Institute of Agriculture, Technology and Sciences
• <i>B.Tech</i>	: Bipin Chandra Tripathi Kumaon Engineering College
Work Experience	
• <i>Teaching</i>	: 19 Years and 8 Months
• <i>Research / Industry</i>	:
E-mail ID	: ajay.k.singh@miet.ac.in, ajay41274@gmail.com
Contact No.	: 8791894008, 8279878298
Area of Interest	: Software Defined Radio
Teaching	
• <i>Subjects Taught at UG Level</i>	: 1. Socket Programming 2. Computer Networks 3. Computer Organization and Architecture 4. Operating Systems 5. Microprocessor 6. Database Management Systems 7. Data Mining and Warehousing 8. Principal of Programming Language 9. Pattern Recognition 10. Design and Analysis of Algorithms 11. Data Structure 12. E-Commerce 13. Introduction to Computer with C 14. Object-Oriented Technique 15. Web Technology 16. Software Engineering 17. Python 18. Mobile Computing
• <i>Subjects Taught at PG Level</i>	: 1. Pattern Recognition 2. Scilab and Python 3. Client Server Computing 4. Advance Database Management Systems 5. Data Mining and Warehousing
Research Guidance	
• <i>B.Tech</i>	: More than 60
• <i>M.Tech</i>	: 11
• <i>Ph.D.</i>	: Guiding One Ph. D Student
Research Publications	
• <i>Journals</i>	: 28
• <i>Conferences</i>	: 15
• <i>Book Chapters</i>	: 01 Book Chapter and 01 in Electronics for you
No. of National/International Conferences attended/ Paper Presented	: 07

No. of Conferences Organized : **01**

STC/FDP/Seminars/Workshops Organized : **01**

STC/FDP/Summer/Winter Schools/Workshops /Seminars attended : **04**

Any other Information

Chaired Sessions for IEEE Conference on 13 Feb 16 at ABES Engg. College Gaziabad (U.P)

Reviewed six papers for IEEE Conference through EasyChair for ABES Engg. College Gaziabad in November 2015.

Chaired two Sessions for IEEE Conference on 16 May 15 in Galgotia University, Greater Noida (U.P)

Reviewed around fifteen papers for IEEE Conference through EasyChair for Galgotia University.

LIST OF PUBLICATIONS

Journal:

1. Nighat Naaz Ansari, **Ajay Kumar Singh**, "Urdu Character Recognition using Neural Network", International Journal of Computer Trends and Technology (IJCTT), ISSN: 2231-2803, vol. 36, no. 4, pp. 172-175, June 2016, **doi: 10.14445/22312803/IJCTT-V36P131**.
2. Nighat Naaz Ansari, **Ajay Kumar Singh**, "License Number Plate Recognition using Template Matching", International Journal of Computer Trends and Technology (IJCTT), ISSN: 2231-2803, vol. 35, no. 4, pp. 175-178, May 2016, **doi: 10.14445/22312803/IJCTT-V35P133**.
3. Deepali Gaur and **Ajay Kumar Singh**, "Improving Energy Efficiency of Femtocell Network with Limited Backhaul Capacity", International Journal of Computer Trends and Technology (IJCTT), ISSN: 2231-2803, vol. 34, no. 1, pp. 34-39, April 2016, **doi: 10.14445/22312803/IJCTT-V34P106**.
4. Abha Sharma and **Ajay Kumar Singh**, "PAPR Reduction Techniques in OFDM System", International Journal of Computer Trends and Technology (IJCTT), ISSN: 2231-2803, vol. 31, no. 1, pp. 17- 19, January 2016.
5. Vaibhav Jain, **Ajay Kumar Singh** and Rajendra Kumar, "Refinement of Latent Fingerprint", International Journal of Engineering Research-Online A Peer Reviewed International Journal, ISSN: 2321-7758, vol. 3, Issue 6, pp. 170- 174, November - December 2015.
6. Anjali Sharma and **Ajay Kumar Singh**, "Color Difference Histogram for Feature Extraction in Video Retrieval," International Journal of Computer Science and Engineering Technology (IJCSET), ISSN: 2229-3345, vol. 6, no. 11, pp. 637-642, November 2015.
7. Anjali Sharma and **Ajay Kumar Singh**, "Noise Invariant Content Based image retrieval using CDH", International Journal of Computational Science and Engineering (IJCSE), ISSN: 2319-7323, vol. 4, no. 6, pp. 314-320, November 2015.
8. Vaibhav Jain and **Ajay Kumar Singh**, "An approach for Minutia Extraction in Latent Fingerprint Matching", International Journal of Innovations in Engineering and Technology (IJET), ISSN: 2319-1058, vol. 6, Issue 1, pp. 51- 58, October 2015.

9. Vaibhav Jain and **Ajay Kumar Singh**, "3D to 2D: Conversion for Latent Fingerprint", International Journal of Emerging Trends & Technology in Computer Science (IJETTCS), ISSN: 2278-6856, vol. 4, Issue 5(2), pp. 91- 93, September-October 2015.
10. Anjali Sharma and **Ajay Kumar Singh**, "CBIR using Query-by-group representatives using Color Difference Histogram", International Journal of Scientific Research in Computer Science Applications and Management Studies (IJSRCS), ISSN: 2319-1953, vol. 4, Issue. 5, September 2015.
11. Anjali Sharma and **Ajay Kumar Singh**, "CBIR through CDH using Query by Group", International Journal of Computer Trends and Technology (IJCTT), ISSN: 2231-2803, vol. 28, no. 1, pp. 21- 27, September 2015.
12. Deepali Gaur and **Ajay Kumar Singh**, "Analysing Energy Efficiency of Cell Selection Schemes for Femtocell Networks with Limited Backhaul Capacity", International Journal of Computer Trends and Technology (IJCTT), ISSN: 2231-2803, vol. 26, no. 1, pp. 1- 5, August 2015, **doi: 10.14445/22312803/IJCTT-V26P101**
13. Sharu Goel and **Ajay Kumar Singh**, "QR Code Implementation in Photo I-Card for Photo and Text Credentials using .NET," International Journal of Computer Applications, Innovations in Computing and Information Technology (Cognition 2015), ISSN: 0975-8887, pp. 20-24, August 2014.
14. Deepak Maheshwari and **Ajay Kumar Singh**, "Implementation of Remote Object Monitoring through video streaming based on bit caching Algorithm over Android Platform", International Journal of Engineering Research and Technology (IJERT), ISSN: 2278-0181, vol. 4, Issue. 05, May 2015.
15. Sharu Goel and **Ajay Kumar Singh**, "Cost Minimization by QR Code Compression," International Journal of Computer Trends and Technology (IJCTT), ISSN: 2231-5381, vol. 15, no. 4, pp. 157-161, September 2014, **doi: 10.14445/22312803/IJCTT-V15P134**.
16. Sharu Goel and **Ajay Kumar Singh**, "A Secure and Optimal QR Code," International Journal of Engineering Research & Management Technology (IJERMT), ISSN: 2348 -4039, vol. 1, Issue 5, pp. 36-43, September 2014.
17. Vijay Kumar, Sunil Kumar, **Dr. Ajay Kumar Singh**, "Outlier Detection: A Clustering-based Approach," International Journal of Innovative Science and Modern Engineering, ISSN: 2319-6386, vol. 1, Issue 7, pp. 16-19, 15 June 2013.
18. Meenu Gupta, **A. K Singh**, Manoj Kumar Pal, "Aperture Coupled Patch Antenna Array for Wireless Application", International Journal of Advances in Electrical and Electronics Engineering, ISSN: 2319-1112, vol. 1, pp. 87-96, March 2013.
19. Saurabh Yadav and **Ajay Kumar Singh**, "A Biometric Traits Based Authentication System for Indian Voting System," International Journal of Computer Application (IJCA), ISSN: 0975-8887, vol. 65, no.15, pp. 159-162, March 2013. **doi: 10.5120/11002-6185**
20. Saurabh Yadav and **Ajay Kumar Singh**, "NoC Based Approach to Enhance the Existing Network Architecture," International Journal of Soft Computing and Engineering (IJSCE) ISSN: 2231-2307, vol. 2, Issue 4, pp. 159-162, 5th Sept. 2012.
21. Ramander Singh, Vinod Kumar, **Ajay Kumar Singh**, Santosh Kumar Upadhyay, "Identifying Faulty Node and Alternative Path in a Network," International Journal of Soft Computing and Engineering (IJSCE) ISSN: 2231-2307, vol. 2, Issue 4, pp. 52-55, 5th Sept. 2012.

22. Kapil Kumar, Prateek Sharma and **Ajay Kumar Singh**, "Configuring the System to Share Internet from Single User to Multi-user with Single Internet Dongle," International Journal of Soft Computing and Engineering (IJSCE) ISSN: 2231-2307, vol. 2, Issue 4, pp. 32-35, 5th Sept. 2012.
23. Prateek Sharma, Kapil Kumar and **Ajay Kumar Singh**, "Trapping Parallel Port to Operate 220V Appliances," International Journal of Recent Technology and Engineering (IJRTE), ISSN: 2277-3878, vol. 1, Issue 3, pp. 107-110, 5th Aug. 2012.
24. Kapil Kumar, Prateek Sharma and **Ajay Kumar Singh**, "Effect on Range of Bluetooth Class 1 Adapter using External Omni Antenna," International Journal of Computer Science and Communication (IJCSC), ISSN: 0973-7391, vol. 3, no. 1, pp. 107-110, Jan.-June. 2012.
25. Prateek Sharma, Kapil Kumar and **Ajay Kumar Singh**, "Single Bit Error Detection and Correction by Matrix Method," International Journal of Research and Innovation in Computer Engineering (IJRICE), ISSN: 2249-6580, vol. 2, Issue 2, pp. 201-206, April 2012.
26. **Ajay Kr. Singh**, G. Singh and D. S. Chauhan, "Implementation of Real Time Programs on the TMS320C6713DSK Processor," International Journal of Signal and Image Processing, vol. 1, no. 3, pp. 160-168, May 2010.
27. **Ajay K. Singh**, P. Kumar, G. Singh and T. Chakravarty, "Linearizer for pulse-shaping of received pulse in ultra-wideband radio systems" ScienceDirect (**Elsevier**) Digital Signal Processing, vol. 20, no. 2, March 2009, pp.496-501, **doi:10.1016/j.dsp.2009.08.001. (SCI Listed.)**
28. **A. K. Singh**, P. Kumar, T. Chakravarty, G. Singh and S. Bhooshan, "A novel digital beamformer with low angle resolution for vehicle tracking radar" Progress In Electromagnetics Research (PIER) vol. 66, pp 229-237, 2006, **doi:10.2528/PIER06112102** **33 Citation**

Books / Book Chapters:

1. Nidhi Bansal and **Ajay Kumar Singh**, "Trust for Task Scheduling in Cloud Computing Unfolds It Through Fruit Congenial, Springer Nature Singapore Pte Ltd. 2018, G.M. Perez et al. (eds.), Networking Communication and Data Knowledge Engineering, Lecture Notes on Data Engineering and Communications Technologies 4, https://doi.org/10.1007/978-981-10-4600-1_4, 2018.

International Magazine:-

Electronics For You

1. **Ajay Kr. Singh**, G. Singh, Ved. P. Mishra and Ankita Taneja, "Frequency allocation in software defined radio using smart cards," Electronics For You, vol. 40, no. 10, pp. 108-114, October 2008.

Conferences:

1. Vaibhav Jain, **Ajay Kumar Singh** and Rajendra Kumar, "An Efficient Approach for Latent Fingerprint Recognition", IEEE International Conference on Computational Intelligence and Communication Technology at ABES Engg. College (CICT-2016), February 2016 (**Accepted Paper ID: 39**).
2. Vaibhav Jain, **Ajay Kumar Singh** and Rajendra Kumar, "A Comparative Study of Touch and Touchless Fingerprint Recognition", International Conference on Recent Trend in Science and Technology,

Management and Social Development (RTSTMSD-15) Kuala Lumpur, Malaysia, pp. 36-42, 22-23 December 2015.

3. Sharu Goel and **Ajay Kumar Singh**, "An Encrypted and Compressed QR Code in I-Card System," IEEE International Conference CICT-2015, At ABES Engineering College Paper ID: 214, 13-14 Feb. 2015.
4. **Ajay Kr. Singh** and Soni Kumari, "Enhanced antennae system with OFDM and FRM technique," International Conference (IEEE) Electro – 2009 IT B.H.U Varanasi, pp. 215-217, 22-24 December 2009.
5. **Ajay Kr. Singh**, Ankita Taneja, Hemant Tandon, Ankur Aggarwal and G. Singh, "Software defined radio_talk through application," International Conference (IEEE) Recent Advances In Microwave Theory and Applications, Jaipur (Rajasthan), pp. 821-824, 21-24 November 2008. doi: **10.1109/AMTA.2008.4763108**
6. **Ajay Kr. Singh**, G. Singh and D. S. Chauhan, "Software defined radio in wireless ad-hoc network", Software Defined Radio Technical Conference SDR'08, 26th to 30th October 2008, Washington DC (USA).
7. Ankita Taneja, Ved. P. Mishra, **Ajay Kr. Singh**, G. Singh and S. P. Ghrrera, "Security architecture for SDR system using OTA download sequence", Software Defined Radio Technical Conference SDR'08, 26th to 30th October 2008, Washington DC (USA).
8. **Ajay Kr. Singh**, Anshu Rajput, Aseem Lodha, Yash Gupta, Dhruva Vishwanathan and G. Singh, "Algorithm design for a hybrid line following automated robot," International Conference on Wireless Networks & Embedded Systems- (WECON-2008), Chitkara Institute of Engineering & Technology, 18-19 October 2008, Rajpura (Punjab).
9. **Ajay K. Singh**, Pradeep Kumar, T. Chakravarty, and G. Singh "Linearizer for pulse-shaping of received pulse in ultra – wideband radar " International Conference on Sensors, Signal Processing, Communication, Control & Instrumentation. Vishwakarma Institute of Technology Pune (Maharashtra), pp. 536-539, 3-5 January 2008.
10. Pradeep Kumar, **Ajay K. Singh**, G. Singh, T. Chakravarty, and S. Bhooshan, "A novel printed cross antenna for wideband application", IEEE-IWAT-07, Cambridge, UK., pp. 255-258 March,2007, doi:**10.1109/IWAT.2007.370123**
11. Pradeep Kumar, **Ajay K. Singh**, G. Singh, T. Chakravarty, and S. Bhooshan, "Terahertz technology-a new direction", IEEE International Symposium on Microwave, pp. 195-201 Bangalore 2006.
12. **Ajay Kr. Singh**, Pradeep Kumar, G. Singh and Amit Kr. Singh, "Banking enquiry by interactive voice response system," National conference on emerging trends in information technology NCEIT-2008, Institute of engineering & emerging technologies, Makhnumajra, Baddi. Dist. Solan. H.P. - 173 205. pp. 436-439, 5th – 6th September 2008.
13. Rakshit Khare, **Ajay Kumar Singh**, "Analysis of the Gnutella Protocol and Identifying the Security Weaknesses." National conference on Network Security at Krishna Institute of Engineering and Technology, Ghaziabad, Uttar Pradesh, 2-3 February 2008.
14. Ankita Taneja, Ved P. Mishra, **Ajay Kr. Singh** and G. Singh "Research overview of software defined radio" National Conference on Wireless and Optical Communication (WOC-2007) at Punjab Engineering College (Deemed University) Chandigarh, pp. 148-152, 13-14 December 2007.

15. Ved P. Mishra, Ankita Taneja, **Ajay Kr. Singh** and G. Singh "Software defined radio architecture with assignment of local frequencies" National Conference on Wireless and Optical Communication (WOC-2007), Punjab Engineering College (Deemed University) Chandigarh, pp. 209-212, 13-14 December 2007.