

## Dr. Bilal Jan

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CONTACT INFORMATION	<u>Office Address</u> Head, Department of Computer Science FATA University District Kohat, KPK, Pakistan	Phone: +92 0915885500 Email: bilal.jan@fu.edu.pk Skype Id: janbilal1
RESEARCH INTERESTS	High Performance Computing, Parallel and Distributed Programming, GPU Acceleration of Computation Intensive Applications (Micromagnetics, Multimedia and Signal Processing Techniques, Big Data Analytic), Design and Analysis of Secured Communication Protocols in network of nodes (Self-Organising Networks: WSN, MANETs, VANETs and Computer Networks in general). Futuristic intelligence in shape of IoT enabled smart and sustainable cities, Computer Aided simulation for Applied Physics and Mathematics applications.	
EDUCATION	<b>Politecnico di Torino</b> , Turin, Italy  Ph.D., <b>COMPUTER AND CONTROL ENGINEERING</b> , March, 2015 <ul style="list-style-type: none"><li>Thesis Topic: <i>Parallel and Distributed Programming for Data-Computation Intensive Applications</i></li></ul> M.S., <b>Computer and Communication Networks Engineering</b> , (Sep,2008 - Nov,2010) <ul style="list-style-type: none"><li>Topic: <i>A reactive approach to secure neighbor position discovery in mobile networks</i></li></ul> <b>University of Peshawar</b> , Peshawar, Pakistan  Bachelor of Science in Computer Science (BS-CS 4-Years)., Deptt:Computer Science, (Sep,2003 - April,2007)	
AWARDS	Scholarships <ul style="list-style-type: none"><li><b>Monitoring of fruit plants for disease identification using Deep Learning</b> awarded under HEC project Establishment of Technology Development Fund (TDF) 3rd call 2018-2019 (11.761 Million)</li><li>HRDI-UESTP MS-Leading to Ph.D scholarship from HEC Pakistan.</li><li>Merit Based Scholarship for BCS (4 Years), University of Peshawar.</li></ul>	
WORK EXPERIENCE	<ul style="list-style-type: none"><li>Assistant Professor, Head of Department <i>Sep 2017-till date</i></li><li>Deputy Controller of Examination (Additional duty)</li><li>Incharge IT Infrastructure (Additional duty) FATA University, Darra Adam Khel, FR Kohat</li><li><u>Assistant Professor</u> <i>March 2015-Sep 2017</i></li><li>Postgraduate Coordinator (Additional duty) Sarhad University of Science and IT, Peshawar</li><li>Visiting Faculty <i>Jan 2011- Sep 2011</i> Department of Computer Science, University of Peshawar Subject : Network Performance and Evaluation Study Plan : MS Course</li><li>Computer Programmer (BPS-16) <i>Jan 2008-Sep 2008</i> UET-University of Engineering and Technology Peshawar Budget and Accounts Section</li></ul>	
TRAINING AND CERTIFICATIONS	<ul style="list-style-type: none"><li><b>Cisco Certified Network Associate</b> (International), CCNA 2008</li></ul>	

PROGRAMMING  
TOOLS AND  
ENVIRONMENTS

- Programming Multi-Core Systems: [OpenCL](#), [Nvidia-CUDA](#)
- Network Performance and Evaluation: [ns-2](#) and [ns-3](#)
- Shared and Distributed Memory Programming: [OpenMP](#), [MPI](#) and Distributed Socket Programming (client/server paradigm).
- Wireless Sensor Networks: [TinyOs](#)

REFEREED  
JOURNAL  
PUBLICATIONS

Published/Accepted

1. Farman, Haleem, Bilal Jan, Zahid Khan, and Anis Koubaa. "A smart energy-based source location privacy preservation model for Internet of Things-based vehicular ad hoc networks." *Transactions on Emerging Telecommunications Technologies* (2020). (**IF 1.594**)
2. Shahzad, Yasir, Huma Javed, Haleem Farman, Jamil Ahmad, Bilal Jan, and Muhammad Zubair. "Internet of Energy: Opportunities, applications, architectures and challenges in smart industries." *Computers Electrical Engineering* 86 (2020): 106739. (**IF 2.663**)
3. M. Tehseen, H. Javed, A. Mehmood, M. Amin, I. Hussain and B. Jan, "Multi Modal Aptitude Detection System for Smart Office," in *IEEE Access*, vol. 7, pp. 24559-24570, 2019, doi: 10.1109/ACCESS.2019.2893202. (**IF 3.745**)
4. Bilal Jan, B. Montrucchio, C. Ragusa, F. KHAN, O. KHAN, "Fast parallel sorting algorithms on GPUs", In *INTERNATIONAL JOURNAL OF DISTRIBUTED AND PARALLEL SYSTEMS*. Vol 3, pp.107-118. ISSN 2229-3957 DOI:10.5121/ijdps.2012.3609.
5. A. Rahim, C. Ragusa, Bilal Jan, O. Khan, "A mixed mid-point Runge-Kutta like scheme for the integration of LLG", in *JOURNAL OF APPLIED PHYSICS*, vol. 115 n.17, 17D101, ISSN 0021-8979. (**IF 2.183**)
6. Haleem Farman, Huma Javed, Jamil Ahmad, Bilal Jan, Muhammad Zeeshan, "Grid-based Hybrid Network Deployment Approach for Energy Efficient Wireless Sensor Networks", *Journal of Sensors*, Hindawi Publishers. Volume 2016 (2016), Article ID 2326917, 14 pages <http://dx.doi.org/10.1155/2016/2326917>. (**IF 0.712**)
7. Huma Javed, Yasir Shahzad, Haleem Farman, Bilal Jan and Sahib Khan, "Variable Length Group Multicasting for IPv6 based Wireless Sensor Network using Protocol Independent Multicast", *SURJ*, Category X-Journal.
8. Fiaz Gul Khan, Bartolomeo Montrucchio, Bilal Jan, Shamshad Shamshirband, Nasir Khan, Anthony Chrono "An Optimized Magnetostatic Field Solver on GPU Using Open Computing Language", *Concurrency and Computation: Practice and Experience*, Wiley Journal (**IF 0.942**).
9. Haleem Farman, Huma Javed, Bilal Jan, Jamil Ahmad, Shaukat Ali, Murad Khan and Falak Naz Khalil, "Analytical Network Process Based Optimum Cluster Head Selection in Wireless Sensor Network", *Plos One Journal* (**IF 3.34**).
10. Bilal Jan, Fiaz Gul Khan, Bartolomeo Montrucchio, Anthony Theodore Chronopoulos, Shamshad Shamshirband, Abdul Nasir Khan, "Introducing ToPe-FFT; an OpenCL based FFT Library targetting GPUs", *Concurrency and Computation: Practice and Experience*, Wiley Journal (**IF 0.942**).
11. Muhammad Imran, Helmut Hlavacs, Bilal Jan, Inam ul Haq, Fakhri Alam, Awais Ahmad, "Provenance Based Data Integrity Checking and Verification in Cloud Environments", *Plos One Journal* (**IF 3.34**).

12. Bilal Jan, Haleem Farman, Murad Khan, Ihtesham Ul Islam, Shaukat Ali, Awais Ahmad and Gwanggil Jeon, "Deep Learning in Big Data Analytics: A Comparative Study", Elsevier Journal on Computers and Electrical Engineering (**IF 1.570**).
13. Shahid Latif, Saeed Mahfooz, Bilal Jan, Naveed Ahmad, Haleem Farman, Murad Khan and Huma Javed, "Multicriteria based Next Forwarder Selection for Data Dissemination in Vehicular Ad Hoc Networks using Analytical Network Process", Journal on Mathematical Problems in Engineering (**IF 0.802**).
14. Bilal Jan, Haleem Farman, Huma Javed, Bartolomeo Montrucchio, Murad Khan and Shaukat Ali, "Energy Efficient Hierarchical Clustering Approaches in Wireless Sensor Networks: A Survey", Wireless Communications and Mobile Computing, Wiley-Hindawi Journal (**IF 1.899**).
15. Shaukat Ali, Azhar Rauf, Naveed Islam, Haleem Farman, Bilal Jan, Murad Khan, Awais Ahmad, "SGKMP: A scalable group key management protocol", Sustainable Cities and Society, Elsevier Journal (**IF 1.968**).
16. Haleem Farman, Bilal Jan, Huma Javed, Naveed Ahmad, Javed Iqbal, Muhammad Arshad, Shaukat Ali, "Multi-criteria based zone head selection in Internet of Things based wireless sensor networks", Future Generation Computer Systems, Elsevier Journal (**IF 4.787**).
17. Shahid Latif, Saeed Mahfooz, Naveed Ahmad, Bilal Jan, Haleem Farman, Murad Khan, Kijun Han, "Industrial Internet of Things Based Efficient and Reliable Data Dissemination Solution for Vehicular Ad Hoc Networks", Wireless Communications and Mobile Computing, Hindawi Journal (**IF 1.899**).
18. Haleem Farman, Bilal Jan, Muhammad Talha, Abi Zar, Huma Javed, Murad Khan, Aziz Ud Din, Kijun Han, "Multicriteria-Based Location Privacy Preservation in Vehicular Ad Hoc Networks", Complexity, Hindawi Journal (**IF 4.621**).
19. Atif Khan, Naomie Salim, Haleem Farman, Murad Khan, Bilal Jan, Awais Ahmad, Imran Ahmed, Anand Paul, "Abstractive Text Summarization based on Improved Semantic Graph Approach", International Journal of Parallel Programming, Springer Journal (**IF 1.156**).
20. Shahid Latif, Saeed Mahfooz, Bilal Jan, Naveed Ahmad, Yue Cao, Muhammad Asif, "A comparative study of scenario-driven multi-hop broadcast protocols for VANETs", Vehicular Communications, Elsevier Journal (**IF 5.108**).
21. Ullaha, Hidayat, et al. "Optic disc segmentation and classification in color fundus images: a resource-aware healthcare service in smart cities." Journal of Ambient Intelligence and Humanized Computing (2018): 1-13 (**IF 1.423**) .

#### REFEREED CONFERENCE PROCEEDINGS

1. Bilal Jan, B. Montrucchio, C. Ragusa, F.G. KHAN, O.U. KHAN, "Parallel Butterfly Sorting Algorithms," IASTED-PARALLEL AND DISTRIBUTED COMPUTING AND NETWORKS (PDCN 2013).  
DOI:10.2316/P.2013.795-026.

#### BOOKS PUBLISHED

1. Murad Khan, Bilal Jan, Haleem Farman, "Deep Learning: Convergence to Big Data Analytics", Publisher Springer Nature Singapore Pte Ltd, Singapore 189721, Singapore. **Springer Publishing**, Turin, Italy

#### AWARDED RESEARCH PROJECTS

1. **Monitoring of Fruit Plants for Disease Identification Using Deep Learning** awarded under HEC project Establishment of Technology Development Fund (TDF) 3rd call 2018-2019 (11.761 Million)

## REFERENCES

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