Curriculum Vitae

PERSONAL INFORMATION Abdul Haseeb

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Sex Male | Date of birth 10/04/1982 | Nationality Pakistani

WORK EXPERIENCE

17/10/2024-Till Date **Associate Professor** [Head of Program (HOP) (Computer Engineering)]
HITEC University Taxila, Pakistan

18/04/2022–16/10/2024 Associate Professor (Acting HoD)(October 2022-August 2023)
Grand Asian University (GAUS), Sialkot (Pakistan)
▪ Curriculum Development for both graduate and undergraduate Programs.
▪ Supervision of both graduate and undergraduate programs.
▪ Research Proposal writing for funding from Local and National donor agencies.

03/10/2013–02/10/2020 Assistant Professor
Institute of Space Technology (IST), Islamabad (Pakistan)
Teaching and Project Supervision of Undergraduate and Graduate Students.
Courses taught:
▪ **Principles of Telecommunication and Packet Networks** (graduate course).
▪ **Computer Networks** (undergraduate course).
▪ **Introduction to Information Technology** (undergraduate course).
▪ **Introduction to Programming** (undergraduate course).
▪ **Introduction to Computers and Programming** (undergraduate course).

21/05/2012–02/10/2013 Assistant Professor
Sarhad University of Science and Information Technology, Peshawar (Pakistan)
Courses taught:
▪ **Advanced Computer Networks** (graduate course).
▪ **Data Communication and Computer Networks** (undergraduate course).
▪ **Introduction to Telecommunication** (undergraduate course).
▪ **Operating Systems** (undergraduate course).
▪ **Network Management** (undergraduate course).
▪ **Introduction to Computers** (undergraduate course).

21/09/2011–21/12/2011 Visiting Researcher
Kingston University, School of Computing and Information System (Under Royal Society Project), London (United Kingdom)
▪ Worked on Scheduling of Video transmission over Wireless systems. This task included working on SVC which is the latest video encoding technology and an extension of the H.264/MPEG-4 AVC video compression standard.
▪ Developed and implemented a new model for transmission of real-time videos. The model is particularly designed for variable bandwidths e.g. Video Broadcasting, Real-time streaming and Teleconferencing.
▪ The model is developed for SVC and uses raw video sequences (video before encoding) exploiting Spatial Indexes (SI) and temporal Indexes (TI) for the first time. Because of this strength it can be used for other video codec.

01/01/2010–30/03/2011   Researcher, Department of Engineering (EU FP7 OPTIMIX Project)
University of Ferrara, Ferrara (Italy)

- OPTIMIX; a European project which includes several industry giants like Siemens, Thales, the aim of which was the optimization of Multimedia over wireless systems using cross layer design of networks.
- Developed a Rate Distortion (RD) model for non-real-time videos in context of SVC and also worked on the optimization of parameters of videos, in order to choose best available parameters for the time varying channels.
- One of the core tasks performed was the development of the rate adaptive technique, which can deliver the best possible video quality layer according to the given bandwidth of the channel. This technique was successfully implemented and tested.
- Worked on the state of the art Simulator (JSVM) for in-depth analyses of the video, its quality and signal processing.

01/09/2005–30/08/2007   Research Associate
COMSATS Institute of Information Technology (CIIT), Abbottabad (Pakistan)

- Assisted senior faculty members in teaching and non-teaching assignments.
- Played an active role in arranging seminars, national and international workshops and national level graduate project competitions.

EDUCATION AND TRAINING

01/01/2009–02/04/2012   PhD in Information Engineering
University of Ferrara, Ferrara (Italy)
Thesis Title: Quality of Experience and Adaptation Techniques for Multimedia Communication
Thesis soft copy Link: eprints.unife.it/701/

01/09/2005–20/02/2008   Master of Science in Computer Engineering
COMSATS Institute of Information Technology, Abbottabad (Pakistan)

01/01/2004–10/05/2005   Master of Information Technology
IQRA University, Karachi (Pakistan)

01/09/2000–30/08/2003   Bachelor of Information Technology
IQRA University, Karachi (Pakistan)

PERSONAL SKILLS

Mother tongue(s)   Pashto

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C2	C1	C1	C2
Arabic	B1	C2	A1	A1	B2
Italian	A2	A2	A2	A2	A1
Urdu	C2	C2	C2	C1	C2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
Common European Framework of Reference for Languages

Digital skills	▪ **Programming Languages:** C\C++, Assembly
	▪ **Environments:** Windows, Linux (Ubuntu), DOS.
	▪ **Engineering tools:** Matlab, Electronics Workbench.
	▪ **Network Simulator:** OMNeT++.
	▪ **Office Suite:** MS Office, Open Office.
	▪ **Others:** Network troubleshooting, Computer Hardware and Software, installations.

Driving license B1, B

ADDITIONAL INFORMATION

Research/Teaching Interests
▪ Multimedia Communications
▪ Computer Networks and Protocols
▪ Cross Layer Design in Networks
▪ Video Communication (SVC)
▪ Image Processing and Video Encoding
▪ Micro Grids and Smart Grids
▪ Wireless Sensors Networks and Energy Management in Networks

Publications

1. Komal Minhas, Tariq M. Khan (Member IEEE), Muhammad Arslan, Syed S. Naqvi, Mansoor Ahmed, Haroon Ahmed Khan, Adnan Haider and Abdul Haseeb, "Accurate pixel-wise skin segmentation using shallow fully convolutional neural network" IEEE Access, vol.8, 156314-156327, Published: August 11 2020 Digital Object Identifier 10.1109/ACCESS.2020.3019183

2. Samia Abid, Turki Ali Alghamdi, Abdul Haseeb, Zahid Wadud, Abrar Ahmed and Nadeem Javaid, "An Economical Energy Management Strategy for Viable Microgrid Modes", Electronics, Volume: 8, Issue: 12, Article Number: 1442, Pages: 1-18, Published: December 2019, EISSN 2079-9292. DOI: https://doi.org/10.3390/electronics8121442. (IF= 1.764, Q3).

3. Aqib Jamil, Turki Ali Alghamdi, Zahoor Ali Khan, Sakeena Javaid, Abdul Haseeb, Zahid Wadud and Nadeem Javaid, "An Innovative Home Energy Management Model with Coordination among Asppliances using Game Theory", Sustainability, Volume: 11, Issue: 22, Article Number: 6287, Pages: 1-23, Published: November 2019, ISSN: 2071-1050. DOI: https://doi.org/10.3390/su11226287. (IF=2.592, Q2)

4. Zahoor Ali Khan, Adia Khalid, Nadeem Javaid, Abdul Haseeb, Tanzila Saba and Muhammad Shafiq, "Exploiting Nature-inspired based Artificial Intelligence Techniques for Coordinated Day-ahead Scheduling to Efficiently Manage Energy in Smart Grid", IEEE Access, Volume: 7, Issue: 1, Pages: 140102-140125, Published: September 2019, ISSN: 2169-3536. DOI: https://dx.doi.org/10.1109/ACCESS.2019.2942813. (IF=4.098, Q1)

5. Aqdas Naz, Nadeem Javaid, Muhammad Babar Rasheed, Abdul Haseeb, Musaed Alhussein and Khursheed Aurangzeb, "Game Theoretical Energy Management with Storage Capacity Optimization and Photo-Voltaic Cell Generated Power Forecasting in Micro Grid", Sustainability, 2019, Volume: 11, Issue: 10, Article Number: 2763, Pages: 1-22, Published: May 2019, ISSN: 2071-1050. DOI: https://doi.org/10.3390/su11102763. (IF=2.592, Q2)

6. Sakeena Javaid, Nadeem Javaid, Tanzila Saba, Zahid Wadud, Amjad Rehman and Abdul Haseeb, "Intelligent Resource Allocation in Residential Buildings Using Consumer to Fog to Cloud Based Framework", Energies, Volume: 2, Issue: 5, Article

Number: 815, Pages: 1-23, Published: March 2019, EISSN 1996-1073. DOI:https://doi.org/10.3390/en12050815. (IF= 2.707, Q2)

7. B. Mansoor, M. I. Tiwana, Syed Junaid Nawaz, Abrar Ahmed, and A. Haseeb, "Data Ridden Pilots based Estimation of Sparse Multipath massive-MIMO Channels using Orthogonal Matching Pursuit" Journal Electronics and Electrical Engineering (Elektronika ir Elektrotechnika), (ISSN: 1392-1215), March 31, 2019. DOI: https://doi.org/10.5755/j01.eie.25.4.23975

8. B. Mansoor, M. I. Tiwana, Syed Junaid Nawaz, J. Ahmed, and A. Haseeb, "GA based Estimation of Sparse MIMO Channels with Superimposed Training," Journal Electronics and Electrical Engineering (Elektronika ir Elektrotechnika), (ISSN 1392-1215). 4th august. 2018, ID: 3994. DOI: https://doi.org/10.5755/j01.eie.24.6.22294

9. S. J. Nawaz, M. I. Tiwana, M. N. Patwary, N. M. Khan, M. I. Tiwana, A. Haseeb "GA Based Sensing of Sparse Multipath Channels with Superimposed Training Sequence" Research journal "Elektronika ir Elektrotechnika" (ISSN: 1392-1215), Nov. 8, 2015. DOI: https://doi.org/10.5755/j01.eee.22.1.14114

10. S. Cicalò, A. Haseeb, V. Tralli "Fairness-Oriented Multi-Stream Rate Adaptation using Scalable Video Coding" Journal of Signal Processing: Image Communication, European Association for Signal Processing (EURASIP), vol 27, no.8, pp 800-813, 2012. ISSN: 0923-5965 (IF=2.814). https://doi.org/10.1016/j.image.2012.01.005

Advance Courses/Seminars/Trainings (Selected)

- "Foundations of Network Localization" by Prof. Moe Win, Massachusetts Institute of Technology, USA (MIT), 13th July 2011 at University of Ferrara, Italy.
- 3rd COST2100 training School on "Cooperating Objects and Wireless Sensor Networks" May 10-12, 2010, Bologna, Italy.
- "Advance OFDM Techniques for Emerging Wireless Communication Networks" by Prof. Luc Vendendorpe, University of Ghent, Belgium 9-10th Sept. 2010 at University of Pisa, Italy.
- "Evaluation of GSM, UMTS Networks" by Eng. Lisa Leonelli, Andrea Conti and Prof. Gianluca Mazzini 8-9 June 2011, University of Ferrara, Italy.
- "National C & IT Symposium" 27-28th June 2012, college of Electrical and Mechanical Engineering, National University of Science and Technology, Pakistan (NUST).
- "Teachers Training" under the Capacity building program, 15-18th October 2012, Department of management Sciences, Sarhad University of Science and IT.
- "Continuing Professional Development Program" Managing Research with Introduction to NVIVO, Institute of Space Technology (IST), 2014, 0.5 CPD credit points.
- "Time Management" Pakistan Planning and Management Institute, Islamabad, 2017.

Fellowships/Awards/Grants

- Ministerial Doctoral Fellowship of Government of Italy for International Students, for pursuing PhD in Information Engineering in University of Ferrara, Italy (2009-2011).
- Higher Education Commission (HEC) Pakistan, Fellowship for MS leading to PhD in Computer Engineering, in COMSATS Institute of Information Technology (CIIT) (2005-2007).
- Best Paper Award for "Multi-Stream Rate Adaptation using Scalable Video Coding with Medium Grain Scalability" 7th International ICST Mobile Multimedia (MOBIMEDIA) Communication Conference, September 2011, Cagliari, Italy.
- Italian National Interuniversity Consortium for Telecommunication (CNIT) grant for presenting paper in 13th IEEE International Conference on Advance Communication Technologies (ICACT) 2011, South Korea.