SAJJAD MOHSIN s/o SYED HASAN MOHSIN

House 416, Street 8, Sector G-10/2, Islamabad, Pakistan Phone: +92-301-5558009

E-mail: smohsin@comsats.edu.pk



OBJECTIVE

Seeking for a challenging and demanding position, which can be professionally as well as financially beneficial to both, the organization and myself.

SPECIAL INTEREST

Neural Networks, Genetic Algorithms, Fuzzy Logic, Soft Computing, Evolutionary Computing, Pattern Recognition, Vector Quantization.

EDUCATION

Ph.D.	Division of Production, Information and Systems Engineering, Muroran Institute of Technology (MIT), Hokkaido. JAPAN	April 2002 - March 2005.
	(Thesis Title): A Study on Pattern Recognition of ECG and Signal Modeling Supervised by Prof. Yukinori Suzuki	
M.E.	Dept. of Computer Science and Systems Engineering MIT. JAPAN	April 2000 - March 2002.
	(Thesis Title): A Study on CP Detection in ECG using Fusion of DP- Matching and Neural Networks in MART NN Supervised by Prof. Yukinori Suzuki	
M.Sc. Computer Sciences	Dept. of Computer Sciences, Quaid-i-Azam University Islamabad. Pakistan	Jan. 1985 – July 1987

(Thesis Title): Library Information Systems Supervised by Prof. Masood

Malik

EXPERIENCE

EXPERIENCE	
Aug 2011 to date	Professor & Dean FIST, COMSATS Institute of Information Technology Islamabad Pakistan
Nov 2010 to August 2011	Dean FIST & Chairman CS (Associate Professor)
	COMSATS Institute of Information Technology Islamabad Pakistan
July 2009 to Nov 2010	Chairman & Head (Associate Professor)
	Department of Computer Science
	COMSATS Institute of Information Technology Islamabad Pakistan
January 2008 to July 2009	Head (Associate Professor)
	Department of Computer Science
	COMSATS Institute of Information Technology Islamabad Pakistan
April 2005 to January 2008	Associate Professor, COMSATS Institute of Information Technology Abbottabad Campus, Pakistan
2004 – 2005	Research Assistant with Prof. Yukinori Suzuki, MIT Japan.
	Research Project: A study on Telecommunication Network Modeling.
2003 - 2004	Research Assistant with Prof. Yukinori Suzuki, MIT Japan.
	Research Project: A study on Congestion Control of Telecommunication Network.
Oct. 2002 – Feb. 2003	Teaching Assistant with Dr. Yasushi Honda, MIT Japan.
	Subject: Information Engineering Basic Practice B.
Oct 1998 – Mar 2000	Researcher with Prof. Yukinori Suzuki at the MIT Japan
July 1992 – Sep. 2003	Systems Analyst, Central Telecom Research Laboratories (CTRL), Pakistan Telecommunication Corporation Ltd. (PTCL), Islamabad. Pakistan
Jun. 1987 – Jul. 1992	Systems Analyst, National Institute of Electronics (NIE), Islamabad. Pakistan

Teaching Experience:

April 2005 – to-date

Graduate Courses

 Neural Networks, Advance Algorithm Analysis, Advance Computer Architecture, Digital Image Processing, Intelligent System Design, Advance Computer Networks

Undergraduate Courses

 Artificial Intelligence, Data Communication & Computer Networks, Advance Computer Architecture

July. 1987 - Oct. 1998

Taught NIE, PTV and CTRL staff the basic course on the use of computer and its application.

Consulting Experience:

Oct. 1994 - Oct. 1998

Design and development of the software for the "On line cricket scoring and graphics system". The software is designed in Visual C using Fox Pro .DBF files for Windows on Novell Network. This involves fresh installation of Mobile Networks at the stadium every day, Pakistan Television (PTV), World Tel UK, Trans World International, utilized the graphics facilities. Design and development of the software for the "On line hockey scoring and graphics system". The software is designed in Visual C using MS Access .DB files for Windows on Novell Network. This involves fresh installation of Mobile Networks at the stadium every day. PTV utilized the graphics facilities. Design and development of the software for "Election 97' On line results and graphics system". The software is designed in Visual C using MS Access .DB files for Windows on Novell Network. Planning, Designing & Installation of three Local Area Networks at Election Commission, PTV center and Press Information Department (PID), Islamabad, respectively and their interconnectivity over leased lines (WAN) to facilitate LIVE on-air Graphic presentation of election results, party positions etc. Similarly, foreign journalists/media were facilitated at PID in order to keep them informed about the latest election results. The feat was widely acknowledged by both foreign and local media.

Sep. 1987 - Oct. 1988

 Designer cum consultant for ID (Islamabad distributors) for the Inventory Control System in dBase-III.

1986

Designed and developed Online Library System for Municipal Library of Rawalpindi city.
 The setup was first ever for any public library in Pakistan, it was inaugurated by the then President of Pakistan and he appreciated the work. The work is done on honorary basis.

GRANTS

2007 - Present

Higher Education Commission, Pakistan approved & funded research project "High Performance Image Processing using Genetic Algorithms on Auto-Load Balancing Symmetric Multi-Processing Platform" worth more than (Pakistan Rs.) 0.6 million as PI.

2011-2013

National ICT R&D Fund approved and funded the research project titled "3D Graphical Imagery Therapy for Healing Brain Tumors in Children" worth more than 11 million PKR as Co-PI

2012-2016

Grand Challenges Canada approve the project titled "Improving mental health care for young adults in Badakhshan Province of Afghanistan using eHealth" worth Canadian \$1 Million as Co-PI in collaboration with University of Calgary, Canada.

HONORS

Member Editorial Board of the "IEEE Transaction of The Fuzzy Systems" Journal Member Editorial Board of the World Information Technology Journal Member Editorial Board of the Information Technology Journal

Approved PhD Supervisor of Higher Education Commission for Pakistan

Member Australian Computer Society

Awarded Japanese Government, Ministry of Education Scholarship for Ph.D.	Apr. 2002 – Mar. 2005
Awarded Japanese Government, Ministry of Education Scholarship for M.E.	Apr. 2000 – Mar. 2002
Awarded Japanese Government, Ministry of Education Scholarship as Research	Oct. 1998 – Mar. 2000
Student. Awarded Merit Scholarship by the Quaid-i-Azam University Islamabad for M.Sc.	Jan. 1985 – Dec. 1986

Research Supervisor:

PhD Awarded 2 as Supervisor:

 Mohammad Mohsin "Adoption of e-Banking in Context of a Developing Country, Pakistan"

20112012

2. Faraz Ahsan "Cope with a Malicious Host in a Mobile Adhoc Networks (MANET)"

PUBLICATIONS International Journal/Conferences

Journal Papers:

Published Papers

- 1. Masood, Saleha, Muhammad Sharif, Mussarat Yasmin, Mudassar Raza, and **Sajjad Mohsin** "Brain Image Compression: A Brief Survey." Research Journal of Applied Sciences, Engineering and Technology 5(1) 49-59 (2013), ISI Indexed.
- 2. Yasmin, Mussarat, Muhammad Sharif, and **Sajjad Mohsin**. "Neural Networks in Medical Imaging Applications: A Survey." World Applied Sciences Journal 22, no. 1 (2013): 85-96, ISI Indexed.
- 3. Sharif, Muhammad, Mudassar Raza, **Sajjad Mohsin**, and Jamal Hussain Shah. "Microscopic Feature Extraction Method." Int. J. Advanced Networking and Applications 4, no. 05 (2013): 1700-1703, ISI Indexed.
- 4. Yasmin, Mussarat, **Sajjad Mohsin**, Isma Irum, and Muhammad Sharif. "Content Based Image Retrieval by Shape, Color and Relevance Feedback." Life Science Journal 10, no. 4s (2013), ISI Indexed.
- 5. Sharif M., Mohsin S., Javed M. Y., Ali M. A., "Single Image Face Recognition Using Laplacian of Gaussian and Discrete Cosine Transforms", International Arab Journal of Information Technology, Vol. 9, No.6, 562-569, Nov 2012, Impact Factor 0.127, ISI Indexed.
- 6. Sharif M., Ayub K., Sattar D., Raza M., Mohsin S., "*Enhanced and Fast Face Recognition by Hashing Algorithm*", JOURNAL OF APPLIED RESEARCH AND TECHNOLOGY, Vol. 10, No. 4, 607-617, Aug 2012, Impact Factor 0.145, ISI Indexed.
- 7. Sadaf Sajjad, **Sajjad Mohsin**, Abdul Hanan Abdullah, Zahra Nouman, "Background Music Generation for Health Game using Children Preffered Music", Archives Des Sciences-Archives of Sciences Journal Switzerland, Geneva, Vol. 65, No. 8, pp. 543-549, Aug 2012, ISSN:1661-464X. Impact Factor: 0.474, ISI Indexed.
- 8. Sadaf Sajjad, Sajjad Mohsin,, Zeeshan Malik, "Efficient way of skull in MRI detect brain tumor by applying Morphological operations, after detection of false background.", International Journal of Information and Education Technology Singapore, Vol. 2, No. 4, pp. 335-337, 2012, ISSN:2010-3689.
- 9. Sadaf Sajjad, **Sajjad Mohsin**, Farah Sana "Involving Enemy Avatar through Categorization Technique in Computer Game for Healing.", International Journal of Information and Education Technology Singapore, Vol. 2, No. 4, pp. 338-340, 2012, ISSN:2010-3689.
- Sadaf Sajjad, Sajjad Mohsin,, Sahar Riaz, "Digitizing 2D sketched Animated Character for Graphical Imagery Therapy (GIT) Game", International Journal of Information and Education Technology Singapore, Vol. 2, No. 4, pp. 341-344, 2012, ISSN:2010-3689.
- 11. Sadaf Sajjad, Sajjad Mohsin,, Saba Riaz, "Enemy Character Design for Graphical Imagery Therapy (GIT) Game", International Journal of Information and Education Technology Singapore, Vol. 2, No. 4, pp. 345-347, 2012, ISSN:2010-3689.
- 12. Mudassar Raza, Muhammad Sharif, Mussarat Yasmin, Saleha Masood and **Sajjad Mohsin**, "*Brain Image Representation and Rendering: A Survey*" Research Journal of Applied Sciences, Engineering and Technology (RJASET), Vol. 4. No. 18, pp. 3274 3282, 2012, ISSN 2040-7467. ISI Indexed.
- 13. Muhammad Sharif, **Sajjad Mohsin**, "Face Recognition Based on Facial Features" Research Journal of Applied Sciences, Engineering and Technology, Vol. 4. No. 17, pp. 2879 2886, 2012 E-ISSN 2040-7459 /

- Mussarat Yasmin, Muhammad Sharif, Saleha Masood, Mudassar Raza, Sajjad Mohsin. "Brain Image Enhancement-A Survey" World Applied Sciences Journal, ISI master list Vol. 17. No. 9, pp. 1192 - 1204, 2012, ISSN 1818-4952.
- 15. Muhammad Sharif, Saad Anis, Mudassar Raza, **Sajjad Mohsin.** "*Enhanced SVD Based Face Recognition*" Journal of Applied Computer Science & Mathematics, **Vol. 12. No. 6**, pp. 49 53 Suceava, 2012.
- 16. Muhammad Sharif, M.A. Ali, Mudassar Raza and Sajjad Mohsin. "Face Recognition Using Edge Information and DCT Sindh University Research Journal (Science Series) in ISI Master LIST and HEC Y Category Vol. 43. No. 2, 2011 pp. 209-214.
- 17. Muhammad Sharif, Muhammad Kamran Ayub, Mudassar Raza and Sajjad Mohsin. "Data Reductionality Technique for Face Recognition" Proceedings of the Pakistan Academy of Sciences, ISI Master List HEC X Category Vol. 48. No.4, 2011 pp. 233-238.
- 18. Azam Khan, Saira Beg, Faraz Ahsan and **Sajjad Mohsin**. "*Bionomic Algorithm for shortest path finding problem*" Journal of Theoretical and Applied Information Technology, **Vol. 34. No. 1, pp. 042 049, 15 Dec 2011**, E-ISSN 1817-3195 / ISSN 1992-8645.
- 19. Muhammad Sharif, Adeel Khalid, Mudassar Raza, **Sajjad Mohsin**, "Face Recognition Using Gabor Filters", Journal of Applied Computer Science & Mathematics (JACSM) Vol. 11. No. 5, 2011 pp. 53-57.
- 20. Muhammad Sharif, **Sajjad Mohsin**, Rana Abdul Hanan, Muhammad Younas Javed, Mudassar Raza, "3D Face Recognition Using Horizontal and Vertical Marked Strips" Sindh University Research Journal (Science Series) in ISI Master LIST and HEC Y Category Vol. 43. No. 1-A, 2011 pp. 57-62.
- 21. Muhammad Sharif, **Sajjad Mohsin**, Mughees Ahmed, Muhammad Younas Javed, Mudassar Raza, "Using Nose Heuristics for Efficient Face Recognition" Sindh University Research Journal (Science Series) in ISI Master LIST and HEC Y Category Vol. 43. No. 1-A, 2011 pp. 63-68.
- 22. Muhammad Sharif, **Sajjad Mohsin**, Muhammad Jawad Jamal , Muhammad Younas Javed, Mudassar Raza.. *Face Recognition for Disguised Variations Using Gabor Feature Extraction*" Australian Journal of Basic and Applied Sciences. ISI Master List .**Vol. 5**, **No.6**, **2011**, **pp: 1648-1656**.
- 23. Nasro Min-Allah, Muhammad Mustafa, **Sajjad Mohsin**, Yongji Wang, "*Unit-quantum Scheduling for Non-preemptive Real-time Tasks*" Midle East Journal of Scientific Research Vol. 7. No. 6, 2011 pp. 837-843.
- 24. Muhammad Sharif, Sajjad Mohsin, Muhammad Younas Javed, "Real Time Face Detection Using Skin Detection (Block Approach)" Journal of Applied Computer Science & Mathematics Vol. 5, No. 10, 2011 pp. 75-81.
- 25. Usman Yaseen, Ali Zahir, Faraz Ahsan, **Sajjad Mohsin** " *Estimating the Effects of Jammers Using Conservation of Flow in Wireless AdHoc Networks*" International Journal for Advances in Computer Science Vol. 1, No. 1, 2011 pp. 5-11.
- 26. Saira Beg, Umair Naru, Mahmood Ashraf, Sajjad Mohsin "Feasibility of Intrusion Detection System with High Performance Computing (HPC): A Survey" International Journal for Advances in Computer Science Vol. 1, No. 1, 2011 pp. 26-35.

- 27. **Sajjad Mohsin**, Faisal Azam "Computational Seismic Algorithmic Comparison for Earthquake Prediction", International Journal of Geology, Vol. 5. No. 3, 2011 pp. 53-59.
- 28. **Sajjad Mohsin**, Ayesha Maqbool, and Waqar A. Khan, "Optimization of Cylindrical Pin-Fin Heat Sinks Using Genetic Algorithms", IEEE Transactions on Components and Packaging Technologies Vol. 32 No. 1, March 2009, pp. 44-52.
- 29. **Sajjad Mohsin**, Sadaf Sajjad "Codebook generation for Image Compression with Simple and Ordain GA" International Journal of Computers and Communications, Vol. 1, No. 2, 2007 pp. 35-40.
- 30. Iftikhar Ahmad Wattoo, Samiullah Swati, **Sajjad Mohsin** "Intrusions Detection Mechanism by Resilient Back Propagation (RPROP)" European Journal of Scientific Research, Vol. 17 No. 4, August 2007 pp. 523-530.
- 31. **Sajjad Mohsin**, Y. Kurimoto, Y. Suzuki, J. Maeda "Characteristic Points Detection in ECG by Fusion of DP Matching and Neural Network", Trans. IEE of Japan, Vol-122-C, No. 10, Oct 2002, pp. 1866-1867.
- 32. Sajjad Mohsin, Y. Kurimoto, Y. Suzuki, J. Maeda "Extraction of the QRS Wave in an Electrocardiogram by Fusion of Dynamic Programming Matching and a Neural Network", Trans. IEE of Japan Vol-122-C, No. 10, Oct 2002, pp. 1734-1741.
- 33. Faraz Ahsan, Ali Zahir and **Sajjad Mohsin**. "Survey on Survival Approaches in Wireless Network against Jamming Attack" Journal of Theoretical and Applied Information Technology. Vol 30. No.1, pp 55-65 2011 E-ISSN 1817-3195, ISSN: 1992-8645.
- 34. Y. Suzuki, Y. Kurimoto, Sajjad Mohsin, J. Maeda, "A method of Extracting QRS Wave in an ECG Based on DP Matching", Trans. IEE of Japan Vol-121-C, No. 7, July 2001, pp. 1285-1286.
- 35. Sajjad Mohsin, Y. Kurimoto, Y. Suzuki "Characteristic Points Detection in ECG using Fusion of DP-Matching and ART Network in Multichannel ART Neural Networks", IEIC Technical Report (Institute of Electronics, Information and Communication Engineers) Vol. 101 No. 130, 2001, pp. 35-41. ISSN: 0913-5685.

Accepted Papers

- 1. Sharif Muhammad; Ayub Kamran; Sattar Danish; Raza Mudassar; **Sajjad Mohsin**; *Enhanced and Fast Face Recognition by Proposing Hashing Algorithm*. **Accepted** for publication in the Journal of Applied Research and Technology (JART) **impact factor 0.220**.
- 2. Mussarat Yasmin, Muhammad Sharif, Saleha Masood, Mudassar Raza, and **Sajjad Mohsin**, "Brain Image Analysis: A Survey" Accepted for publication in the World Applied Sciences Journal (WASJ), ISI Indexed.
- 3. Mussarat Yasmin, Muhammad Sharif, Saleha Masood, Mudassar Raza, and **Sajjad Mohsin**, "Brain Image Reconstruction: A short Survey" Accepted for publication in the World Applied Sciences Journal (WASJ), ISI Indexed.
- 4. Saleha Masood, Muhammad Sharif, Mussarat Yasmin, Mudassar Raza, and **Sajjad Mohsin**, "*Brain Image Compression: A Survey*" **Accepted** for publication in the Research Journal of Applied Sciences, Engineering and Technology (RJASET), **ISI Indexed.**
- Muhammad Sharif, Sajjad Mohsin and Muhammad Younas Javed, "A Survey: Face Recognition Techniques"
 Accepted for publication in the Research Journal of Applied Sciences, Engineering and Technology (RJASET),
 ISI Indexed.
- 6. Waqar A. Khan, **Sajjad Mohsin**, Sadaf Sajjad, Qasim Ali "Optimization of Micro-channel Heat Sinks Using Genetic Algorithm" Accepted for publication in International Journal Heat Transfer Engineering.

- 7. Muhammad Sharif, Sajjad Mohsin, Muhammad Younas Javed, Muhammad Atif Ali "Single Image Face Recognition using Laplacian of Gaussian and Discrete Cosine Transforms" Accepted for publication in International Arab Journal of Information Technology (IAJIT) impact factor 0.065.
- Hasham Sheraz Ali, Umar Nauman, Faraz Ahsan and Sajjad Mohsin "Genatic Algorithm based bowling couch for cricket" Accepted for publication in Journal of Theoretical and Applied Information Technology E-ISSN 1817-3195 / ISSN 1992-8645.

Submitted Papers

- 1. Faraz Ahsan, Saira Beg and Sajjad Mohsin. "Packet-Feed: A survival approach to cope up with Jamming Attack in MANET". Submitted in Computer Communications, The International Journal for the Computer and Telecommunications Industry. ISSN: 0140-3664. Imprint: ELSEVIER.
- 2. Muhammad Sharif, Adeel Khalid, Mudassar Raza, Sajjad Mohsin." *Face Detection and Recognition through Hexagonal Image Processing*". Submitted in International Arab Journal of Information Technology (IAJIT).
- 3. Ali Muhammad Atif; Sharif Muhammad; Mohsin Sajjad; Javed Muhammad Younas; Raza Mudassar; *An Effective Preprocessing Technique for Accurate Face Recognition Using Local Binary Pattern and Laplacian of Gaussian Filters*. Submitted in The Journal of Applied Research and Technology.

Conference Papers

Internationals

- 1. **Sajjad Mohsin** and Fatima Zaka, "An unsupervised learning based LSTM model: a new architecture" Proceedings of the 2011 American conference on applied mathematics and the 5th WSEAS international conference on Computer engineering and applications (AMERICAN-MATH'11/CEA'11), Mexico January 2011, pp. 49-53, ISBN: 978-960-474-270-7
- Muhammad Sharif, Sajjad Mohsin, Muhammad Jawad Jamal, Mudassar Raza "Illumination Normalization Process for Face Recognition" 2010 International Conference on Environmental Science and Information Application Technology (ESIAT) Wuhan, China, 17-18 July 2010, pp 44-47, ISBN: 978-1-4244-7387-8
- 3. **Sajjad Mohsin**, "Optimization of Fuzzy Model through Reinforced Learning" International Conference on Artificial Intelligence and Pattern Recognition (AIPR-10) Orlando, Florida, USA, July 12-14, 2010, pp. 251-255, ISBN: 978-1-60651-015-5
- 4. Ahsan, F. Djahel, S. Nait-Abdesselam, F. **Mohsin, S.** "Neighbor based channel hopping coordination: Practical against jammer?" LCN 2009. IEEE 34th Conference on Local Computer Networks, 2009 Zurich, Switzerland pp. 993-998. ISBN: 978-1-4244-4488-5 INSPEC Accession Number: 11021629
- Syed Junaid Nawaz, Sajjad Mohsin, Ataul Aziz Ikaram, "Neural Network Based MIMO-OFDM Channel Equalizer Using Comb-Type Pilot Arrangement," Future Computer and Communication, International Conference on, pp. 36-41, 2009 International Conference on Future Computer and Communication, Kuala Lumpar, Malaysia April 03-05 2009, ISBN: 978-0-7695-3591-3.
- 6. **Sajjad Mohsin,** "Unsupervised Learning based Feature Points Detection in ECG" Proceedings of the 8th WSEAS International Conference on SIGNAL, SPEECH and IMAGE PROCESSING (SSIP '08) Santander, Cantabria, Spain, September 23-25, 2008 pp.157-160, ISBN: 978-960-6474-008-6, ISSN: 1790-5109
- Sadaf Sajjad, Sajjad Mohsin, "Evolutionary Computation using Reinforced Learning on Image Compression" Proceedings of the 8th WSEAS International Conference on SIGNAL, SPEECH and IMAGE PROCESSING (SSIP '08) Santander, Cantabria, Spain, September 23-25, 2008 pp.153-156, ISBN: 978-960-6474-008-6, ISSN: 1790-5109
- 8. Faraz Ahsan, M Ikram Lali, Imran Ahmad, A.F.M. Ishaq and **S. Mohsin,** "Exploring the Effect of Directory Depth on File Access for FAT and NTFS File Systems" Proceedings of the 8th WSEAS International Conference on SYSTEMS THEORY and SCIENTIFIC COMPUTATION (ISTASC'08) Rhodes, Greece, August 20-22, 2008 pp. 130-135 ISBN: 978-960-6766-96-1, ISSN: 1790-2769.
- 9. Iftikhar Ahmad, M.A Ansari, **Sajjad Mohsin**, "Performance Comparison between Backpropagation Algorithms Applied to Intrusion Detection in Computer Network Systems", Proceedings of the 9th WSEAS International Conference on NEURAL NETWORKS (NN'08) Sofia, Bulgaria May 2-4 2008 pp 231-236. ISBN: 978-960-6766-56-5. ISSN: 1790-5109
- 10. Sajjad Mohsin, Sadaf Sajjad, "Genetic Algorithm based Consequent Parameters determination of Fuzzy-C

- **Regression Model** (FCRM)" Proceedings of the 9th WSEAS International Conference on. EVOLUTIONARY COMPUTING (EC'08) Sofia, Bulgaria May 2-4 2008 pp 149-154. ISBN: 978-960-6766-58-9, ISSN: 1790-5109.
- 11. S. M. Azam, Z.A. Mansoor, M. Shahzad Mughal, **S. Mohsin**, "Urdu Spoken Digits Recognition Using Classified MFCC and Backpropation Neural Network" cgiv, pp. 414-418, IEEE proceedings of Computer Graphics, Imaging and Visualisation (CGIV 2007), 4th International Conference Computer Graphics, Imaging and Visualization 14, 15 17 August 2007 Bangkok · Thailand
- 12. Muhamamd Shahazad Mughal, M. Nawaz, Farhan Ahmad, Saadia Shahzad, A.K. Bhatti, **S. Mohsin**, "**A 3D-Hash Function for Fast Image Indexing and Retrieval**" cgiv, pp. 341-348, IEEE proceedings of Computer Graphics, Imaging and Visualisation (CGIV 2007), 4th International Conference Computer Graphics, Imaging and Visualization 14, 15 17 August 2007 Bangkok · Thailand.
- 13. Sadaf Sajjad, **Sajjad Mohsin** "Comparative Study on VQ with Simple GA and Ordain GA" Proceedings of the 9th WSEAS International Conference on AUTOMATIC CONTROL, MODELING & SIMULATION (AMCOS '07) Istanbul, Turkey, May 27-29, 2007 pp. 203-207, ISBN: 978-960-8457-72-0, ISSN: 1790-5117.
- 14. T.K. Khan, S.M. Azam, and **Sajjad Mohsin** "An Improvement over Template Matching using K-Means Algorithm for Printed Cursive Script Recognition", Signal Processing, Pattern Recognition, and Applications SPPRA 2 2/14/2007 2/16/2007 Innsbruck, Austria.
- Zeeshan Irshad, Syed Junaid Nawaz, Sajjad Mohsin "A Real Time System for Multicast Fax using IP Network".
 Sixth International Conference on Computer and Information Technology (CIT 2006), 20-22 September 2006, Seoul, Korea. IEEE Computer Society 2006, ISBN 0-7695-2687-X CIT 2006
- 16. Sajjad Mohsin "Characteristic Points Detection in ECG using Fusion of DP-Matching and ART Network in Multichannel ART Neural Networks" Bioengineering workshop by Institute of Electronics, Information and Communication Engineers, in Sapporo Hokkaido Japan on June 22nd 2001.
- 17. **Sajjad Mohsin** "Characteristic points recognition in ECG using Neural Networks" at 33rd Society of Instrument and Control Engineers Hokkaido branch scientific seminar held in Sapporo Hokkaido Japan from Jan 29-30, 2001

National

- Saira Beg, Faraz Ahsan, Sajjad Mohsin, "Engaging the Jammer on the Jammed Channel in MANET" 6th
 International Conference on Emerging Technologies (ICET 2010) Islamabad, Pakistan October 18-19 2010
 pp. 410-413
- 2. Attiqa Rehman, Syed Sajid Hussain, **Sajjad Mohsin** "**Motivating Corporation in Mobile AdHoc Networks: A Step Forward**" at **4**th **Workshop on Frontier in Information Technology** (**FIT**) held at Marriot Hotel, Islamabad Pakistan on 21st-22nd December 2006.

Conferences Session Chaired:

- 1. **Professional Ethics in a Globalized World: Towards a Unified East-West Perspective Workshop**, Doha Qatar May 11-12 2011
- 2. 2011 American conference on applied mathematics and the 5th WSEAS international conference on Computer engineering and applications (AMERICAN-MATH'11/CEA'11), Mexico January 2011
- 3. **8th Workshop on Frontier in Information Technology (FIT)** held at Serena Hotel, Islamabad Pakistan on 21-23 December 2010
- 4. **International Conference on Artificial Intelligence and Pattern Recognition (AIPR-10)** Orlando, Florida, USA, July 12-14, 2010
- 5. **5**th **Workshop on Frontier in Information Technology (FIT)** held at Marriot Hotel, Islamabad Pakistan on 17th-18th December 2007.
- 6. 9th WSEAS International Conference on Automatic Control, Modeling & Simulation (AMCOS '07) Istanbul, Turkey, May 27-29, 2007.
- 7. **4th Workshop on Frontier in Information Technology (FIT)** held at Marriot Hotel, Islamabad Pakistan on 21st-22nd December 2006.
- 8. **3rd Workshop on Frontier in Information Technology (FIT)** held at Marriot Hotel, Islamabad Pakistan on 22nd -23rd December 2005.
- 9. 1st COMSATS Workshop on Research in Computing (CWRC) held at Abbottabad Pakistan on May 2005.

RESEARCHES

Currently supervising 4 PhD scholars & 5 MS Students, 19 Students have completed their MS under my supervision.

MS Thesis Supervised at COMSTAS Institute of Information Technology, Abbottabad

Name	Year	Thesis	Level
Sheikh Muhammad Azam	2006	On Fast Recognition of Printed Urdu Cursive Script using Soft	MS/M.Phil
		Computing and Conventional Techniques	
Kashif Bilal	2006	MUHADITH: A Web-based Multilingual Distributed Expert	MS/M.Phil
		System for Classification of Ahadith	
Syed Kashif Hussain Shah	2006	Machine Translation using Genetic Algorithm	MS/M.Phil
Farhan Ahmed	2006	Secure and Efficient Key Management for Mobile Adhoc Networks	MS/M.Phil
Muneer Ahmad	2007	An Integrated Approach for Motif Discovery in Unaligned DNA	MS/M.Phil
		Sequences	
Masood ur Rehman	2007	Optical Path Selection: An Analysis for Bluetooth Scatternet.	MS/M.Phil
Adnan Khalid Bhatti	2007	Dynamic Network Intrusion Detection at MAC Address	MS/M.Phil
Assad Ali Safi	2007	Clustering of Cancer Cell using Techniques of Fuzzy c-Means	MS/M.Phil
		Model.	
Iftikhar Ahmad	2007	Intrusion Detection Mechanism By Artificial Neural Network.	MS/M.Phil
Tassawar Iqbal	2007	Data Warehouse Model in Sport of CiRM for Education Sector at	MS/M.Phil
		HSSC/ SSC level	
Imran Ashiq	2007	Job-based Decision Oriented Analysis Approach for Data	MS/M.Phil
		Warehouse Design	
Mushtaq Ali	2007	Efficient Algorithm for detecting Fraudulent Clicks	MS/M.Phil
Muhammad Shahzad	2007	Neural Network Compression Filter for VOIP	MS/M.Phil
Sadia Shahzad	2007	Variations in TFRC for VOIP Using Modified CODEC System	MS/M.Phil
Syed Junaid Nawaz	2008	MIMO-OFDM Channel Estimation & compensation using Neural	MS/M.Phil
_		Networks	
Hifza Ali	2008	Requirements Engineering Development and Management	MS/M.Phil
		Framework (REDMF)	
Fahad Rafique Golra	2008	Using GORE Model for Component based Development	MS/M.Phil
Fatima Zaka	2010	Recurrent Neural Networks: Modeling Cognitive Reasoning	MS/M.Phil
		Processes	

2002 – 2003 Supervised a Master's student at **MIT Japan** in the research on: *A comparative study on Vector Quantization by Simple Genetic Algorithm and Deterministic Genetic Algorithm*. This was performed using MATLAB.

International Collaboration

- Instrumental in Making Research Collaboration with GET Lab Department of Computer Science Paderborn University, Germany
- Established and put CIIT, Pakistan on world ALICE GRID with the collaboration of CERN, Switzerland
- Collaborating on a research project with North Dakota State University (NDSU) USA.
- Establishing research collaboration with EPFL Lausanne, Switzerland on their project of Blue Brain.
- Publishing Chair of "1st International Workshop on Distributed Computing in Ambient Environments (DiComAe) Sep, 2009 Paderborn Germany, we have published the book of Proceedings in Pakistan and dispatch it to Germany for distribution at the Workshop.
- Collaborating with University of Lille France and send one of my PhD student for 6 months research work on their
 expanses.
- Develop the CS Curricula for CIIT-Lancaster Joint Degree program that is approved by the Board of Governors of Lancaster University UK.

Administrative / Academic Responsibilities

- Convener Board of Faculty for Information Sciences & Technology
- Convener Board of Studies for Computer Science
- Member Board of Faculty for Engineering
- Member Board of Faculty for Architecture
- Member Board of Faculty for Sciences
- Member Board of Studies Engineering
- Coordinator of MS Program for Computer Science and Computer Engineering

- Chairman Extra Curricular activities
- Member Convocation 2005 Organizing Committee Chairman Disciplinary Committee
- Incharge Network Research & Development (Sun Solaris) Lab.
- Member Convocation 2007 Organizing Committee