# Syed Waqar ul Qounain, Jaffry

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(last update: 28-09-2018)

# **ACADEMIC QUALIFICATIONS**

ACADEMIC	QUALIFICATIONS
2011 – 2011	Postdoc in Ambient Intelligence at Agent Systems Research Group, Department of Artificial Intelligence, VU University Amsterdam, The Netherlands.
	<b>Project:</b> EU FP7-ICT - SOCIONICAL - Complex Socio-Technical System in Ambient Intelligence
2007 – 2011	PhD in Computer Science at Agent Systems Research Group, Department of Artificial Intelligence, VU University Amsterdam, The Netherlands.
	<b>Thesis:</b> Analysis and Validation of Models for Trust Dynamics <b>Promoter:</b> prof. dr. Jan Treur, <b>Co-Promoter:</b> dr. Mark Hoogendoorn
1999 – 2001	Master of Science (M. Sc.) in Computer Science from Department of Computer Science University of the Punjab, Lahore, Pakistan
1998 – 1999	Postgraduate Diploma (PGD) in Computer Science from Department of Computer Science University of the Punjab, Lahore, Pakistan
1996 – 1998	Bachelor of Science (B. Sc.) in Physics, Pure and Applied Mathematics from Punjab University, Lahore, Pakistan
1994 – 1996	Intermediate in Pre-Engineering (F. Sc. Higher Secondary School Examination), from Board of Intermediate and Secondary Education, Lahore, Pakistan
1992 – 1994	Matriculation (Secondary School Examination), from Board of Intermediate and Secondary Education, Lahore, Pakistan

#### **EMPLOYMENT HISTORY**

2012 – to date	Full time Assistant Professor on Tenure Track System, Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan
2012 – 2012	Full time Assistant Professor on contract basis, Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan
2011 – 2011	PostDoc Researcher, Agent Systems Research Group, Department of Artificial Intelligence, VU University Amsterdam, The Netherlands
2007 – 2011	Full time PhD candidate in Computer Science, Agent Systems Research Group, Department of Artificial Intelligence, VU University Amsterdam, The Netherlands
2002 – 2007	Full time Lecturer on contract basis, Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan
2001 – 2002	Visiting Lecturer, Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan
2001 - 2002	Permanent Lecturer, Pak Institute of Management and Computer Sciences, Lahore, Pakistan
1999 - 2001	Permanent Senior Software Instructor, Pak Polytechnique Institute, Lahore, Pakistan

#### RESEARCH, REPORTS AND CREATIVE ACTIVITIES

(\* mark indicates that names of the authors are in alphabetical order and all can be regarded as having made a comparable contribution)

# Books, Book Chapters, Conference and Workshop Proceedings Edited/Compiled

- 1. Arts, M., Avital, M., Bennamar, K., Besselink, T., Boog, W., Collard, P., Colton, S., Corneille, S., Germans, D., Gielink, S., Hanson, A., Hanson, D., Hekkert, P., Hoekendijk, C., Hoorn, J. F., Jaffry, S. W., Jensenius, H., Krabbendam, D., Kresin, F., Kuipers, A., Kuipers, T., Lee, M., Lindenberg, V., Lowe, J., Straffon, L. Miller, A. I., Molella, A., Olthof, T., Ott, C., Otte, M., Poelman, W., Pontier, M., Postma, A., Roosendaal, L., Rump, V., Runco, M., Smeulders, A., Taylor, R., van den Herik, J., van der Kooij, K., van der Sloot, J., van der Veen, O., van Dijk, G., van Gorsel, P., van Rosmalen, B., van Uden, J., Werner, J., Organic Creativity and Physics Within, (2013), John Benjamins Publishing.
- 2. Jaffry, S. W., (2011), Analysis and Validation of Models for Trust Dynamics, PhD Thesis, VU University Amsterdam, The Netherlands.
- 3. Jaffry, S. W., (2005), 1st National Conference on Trends and Practices of Free and Open Source Software Technologies, August 18th 19th, 2005, Lahore, Pakistan, TPFOSST 05.
- 4. \*Pasha, M. A., Jaffry, S. W., Danish S., (2004), "Proceedings of Computer Science Teachers Training Workshop 2004", August 2004, Punjab University College of Information Technology, Lahore, Pakistan, CSTTW'04.
- 5. Jaffry, S. W., (2004), 1st Student Conference on Computer Science Spring 2004, June 22nd 24th, 2004 at Punjab University College of Information Technology Lahore, Pakistan. SCCS04.
- 6. Jaffry, S. W., (2003), Data Structures a Complete Course, (electronic format).
- 7. Jaffry, S. W., (2001), Operating System and C Language along with Professional Supplement of UNIX, MSDOS and Computer Graphics, edited book published by Sajjid Publishers Urdu Bazaar Lahore, Pakistan.

### Published Research Papers in International Journals

- 1. Nasar, Z., Jaffry, S. W., Malik, M. K., Information Extraction from Scientific Articles: A Survey, Scientometrics, Springer, 2018, pp. 1-60. Impact Factor 2.147.
- 2. Ahmad, A., Yousaf, M. M., Sarwar, S. Jaffry, S. W., Aslam, L., Khalid, M., *Optimized Scheduling for Parallel Computing Environment*, Sindh University Research Journal, vol. 50, no. 2, University of Sindh, Jamshoro, Pakistan, 2018, pp. 295-302.
- 3. Nasar, Z., Jaffry, S. W., *Trust-based Situation Awareness: Comparative Analysis between Agent-Based and Population-Based Modeling*, Complexity, Hindawi. vol. 2018, Article ID 9540726, 16 pages, 2018. Impact Factor 4.621.
- 4. Aslam, L., Sarwar, S., Yousaf, M. M., Jaffry, S. W., *Cycle Discrepancy of Cubic Toeplitz Graphs*, Pakistan Journal of Engineering and Applied Sciences, vol. 22, University of Engineering and Technology, Lahore, Pakistan, 2018, pp. 14-19.
- Yousaf, M. M., Sadiq, U., Aslam, L., Jaffry, S. W., Sarwar, S., A Novel Parallel Algorithm for Edit Distance Computation, Mehran University Research Journal of Engineering & Technology, vol. 37, no. 1, Mehran University of Engineering & Technology, Jamshoro, Pakistan, 2018, pp. 223-232.
- 6. Latif, I., Jaffry, S. W., Sarwar, S., Aslam, L., Yousaf, M. M., Framework for Evaluating Credibility of External Links in Wikipedia, The Journal of Bahria University Information and Communication Technologies (BUJICT), vol. 10, issue II, Bahria University Information and Communication Technologies, Islamabad, Pakistan, 2017, pp. 1-9.

- 7. Sarwar, S., Aslam, L., Jaffry, S. W., Yousaf, M. M., *Novel Composite Burst Assembly for OBS-Networks*, Sindh University Research Journal, vol. 49, no. 4, University of Sindh, Jamshoro, Pakistan, 2017, pp. 773-778.
- 8. Faisal, S., Sarwar, M., Shahzad, K., Sarwar, S., Jaffry, S. W. and Yousaf, M. M., *Temporal and Evolving Data Warehouse Design*, Scientific Programming, Hindawi. vol. 2017, Article ID 7392349, 18 pages, 2017. Impact Factor 0.627.
- 9. Sarwar, S., Khalid, H., Aslam, L., Jaffry, S. W., Yousaf, M. M., *Analytical Model of Delayed Server System (DSS) for Energy Conservation*, Sindh University Research Journal, vol. 49, no. 3, University of Sindh, Jamshoro, Pakistan, 2017, pp. 529-534.
- 10. Junaid, S. M., Jaffry, S. W., Yousaf, M. M., Aslam, L., Sarwar, S., Sentiment Analysis and Opinion Mining A Facebook Posts and Comments Analyzer, Technical Journal, vol. 22, no. II, University of Engineering and Technology (UET) Taxila, Pakistan, 2017, pp. 98-104.
- 11. Ahmed, S., Yousaf, M. M., Jaffry, S. W., Sarwar, S., Aslam, L., Comparison of Resource Management Frameworks for Processing Big Data, The Journal of Bahria University Information and Communication Technologies (BUJICT), vol. 9, issue II, Bahria University Information and Communication Technologies, Islamabad, Pakistan, 2016, pp. 34-38.
- 12. Aslam, L., Sarwar, S., Yousaf, M. M., Jaffry, S. W., *Cycle Discrepancy of d-Colorable Graphs.* Pakistan Journal of Engineering and Applied Sciences, University of Engineering and Technology, Lahore. vol. 18, pp. 50-55, 2016.
- 13. Mubasher, M. M., Jaffry, S.W., *Incorporation of the Driver's Personality Profile in an Agent Model.* In: PROMET Traffic & Transportation, (PTT), vol. 27, no. 6, pp. 505-514, 2015. Impact Factor 0.43.
- 14. \*Hoogendoorn, M., Jaffry, S.W., Maanen, P.P. van, and Treur, J., *Design and Validation of a Relative Trust Model.* In: Knowledge-Based System (KBS), vol. 53, Elsevier B. V. 2014, pp. 81-94. Impact Factor 4.529.
- 15. \*Hoogendoorn, M., Jaffry, S.W., Maanen, P.P. van, and Treur, J., *Modelling Biased Human Trust Dynamics*. In: Web Intelligence and Agent Systems: An International Journal (WIAS), vol. 11, no. 1, IOS Press, 2013, pp. 1-21.
- 16. \*Jaffry, S.W., and Treur, J., *Agent-Based and Population-Based Modelling of Trust Dynamics*. In: Transactions on Computational Collective Intelligence (TCCI), vol. 9, Springer Verlag, 2013, pp 124-151.
- 17. \*Bosse, T., Jaffry, S.W., Siddiqui, G.F., Treur, J., Comparative Analysis of Agent-Based and Population-Based Modelling in Epidemics and Economics. In: Multiagent and Grid Systems, An International Journal (MAGS), vol. 8, no. 3, IOS Press, 2012, pp. 223-255.
- 18. \*Hoogendoorn, M., Jaffry, S.W., and Treur, J., Cognitive and Neural Modeling of Dynamics of Trust in Competitive Trustees. In: Cognitive Systems Research Journal (CSR), vol. 14, no. 1, Elsevier B. V., 2012, pp. 60-83. Impact Factor 1.182.
- 19. \*Bosse, T., Both, F., Hoogendoorn, M., Jaffry, S.W., Lambalgen, R. van, Oorburg, R., Sharpanskykh, R., Treur, J., and Vos, M. de, *Design and Validation of a Model for a Human's Functional State and Performance.* In: International Journal of Modeling, Simulation, and Scientific Computing (IJMSSC), vol. 2, no. 4, World Scientific Publishing, 2011, pp. 413-443.
- 20. \*Bosse, T., Gerritsen, C., Hoogendoorn, M., Jaffry, S.W., and Treur, J., *Agent-Based versus Population-Based Simulation of Displacement of Crime: A Comparative Study*. In: Web Intelligence and Agent Systems Journal (WAIS), vol. 9, no. 2, IOS Press, 2011, pp. 147-160.

#### International Journal Submissions (submitted):

- 1. Hoogendoorn, M., Jaffry, S.W., and Treur, J., *Decision Making in Dynamic Environments Based on Interdependent Trust States.* Cognitive Computation. Impact Factor 3.479
- 2. Mubasher, M. M., Jaffry, S. W., *Modeling of Individual Differences in Driver Behavior*, Journal of Ambient Intelligence and Humanized Computing, Springer. Impact factor 1.423
- 3. Iftakhar, A., Jaffry, S. W., Malik, K., *Information Mining from Criminal Judgments of Lahore High Court*, IEEE Access, IEEE. Impact factor 3.557
- 4. Sadiq, U., Yousaf, M. M., Aslam, L., Aleem, M., Sarwar, S., Jaffry, S. W., NvPD: Novel Parallel Edit Distance Algorithm, Correctness, and Performance Evaluation, IEEE Transactions on Parallel and Distributed Systems, IEEE. Impact factor 4.181
- 5. Haris, M., Jaffry, S. W., Location Object Based Framework for Social Networking, IEEE Access, IEEE. Impact factor 3.557

# Published Research Papers in International Conferences and Workshops Proceedings

- 1. Nasar, Z., Jaffry, S. W., Malik, M. K., *Tagging Assistant for Scientific Articles*. In proceeding of International Conference on Intelligent Technologies and Applications (INTAP'18), Bahawalpure, Pakistan, 2018, to appear.
- 2. Sharaft, S., Nasar, Z., Jaffry, S. W., Legal Data Mining from Civil Judgments. In proceeding of International Conference on Intelligent Technologies and Applications (INTAP'18), Bahawalpure, Pakistan, 2018, to appear.
- 3. Nasar, Z., Jaffry, S. W., Trust-based Situation Awareness: Agent-Based versus Population-Based Modeling A Comparative Study. In proceedings of International Conference on Advancements in Computational Sciences (ICACS), Lahore, Pakistan, 2018, pp. 1-7. [BEST PAPER AWARD]
- Mubasher, M. M. Jahangir, R., Jaffry, S. W., Modeling of Individual Differences in Car-following Behavior of Drivers. In proceeding of 20th IEEE International Multitopic Conference (INMIC), Lahore, Pakistan, 2017, pp. 1-7.
- Naveed, M., Jaffry, S. W., Modeling of Neurotic Personality Trait of Pedestrians in Panic Situation. In Proceedings of 20th IEEE International Multitopic Conference (INMIC), Lahore, Pakistan, 2017, pp. 1-6.
- 6. Fatima, B., Jaffry, S. W., Mubasher, M. M., Sherwani, A., *Human Acceptance of Autonomous Social Media Agent.* In: Proceedings of 4th International Conference on Future Internet of Things and Cloud (FiCloud-2016), Vienna, Austria, 22 24 August, 2016. IEEE Computer Society, pp. 200-205.
- 7. Mubasher, M. M., Jaffry, S. W., Systematic Literature Review of Vehicular Traffic Flow Simulators. In: Proceedings of 1st International Conference on Open Source Software Computing (OSSCOM 2015), Jordan, September, 10-13, 2015, pp. 1-6.
- 8. Shoaib, H., Jaffry, S. W., *A Survey of Augmented Reality*. In: Proceedings of International Conference on Virtual and Augmented Reality (ICVAR 2015), January, 8-9, 2015, Singapore, pp. 91-99.
- 9. Haris, M., Jaffry, S. W., An Object Based Conceptual Framework for Location Based Social Networking. In: Proceedings of International Workshop on Location-Based Social Networks (LBSN'13) associated with the 21st ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems, November 5-8, 2013, Orlando, Florida, USA, pp. 15-23.
- 10. Saeed, A., R., Jaffry, S. W., *Information Mining from Islamic Scriptures*. In: Proceedings of 4th Workshop on South and Southeast Asian Natural Language Processing (WSSANLP) associated with the International Joint Conference on Natural Language Processing (IJCNLP), Nagoya, Japan, October 14th 18th, 2013. Asian Federation of Natural Language Processing, 2013, pp. 66-71.

- 11. Latif, I., Jaffry, S. W., A Survey on Trust Evaluation Mechanisms for Wikipedia. In: Proceedings of the International Workshop on Social Natural Language Processing (SocialNLP) in conjunction with 6th International Joint Conference on Natural Language Processing (IJCNLP), Nagoya, Japan, October 14th 18th, 2013. Asian Federation of Natural Language Processing, 2013, pp. 36-42.
- 12. Mansoor, F., Rohail, M., Jaffry S. W., *Empirical Validation for Human Decision Making*. In: Proceedings of the Seventh International Workshop on Human Aspects in Ambient Intelligence in International Conference on Intelligent Agent Technology (HAI-IAT'13), Atlanta, GA, USA, 17th November 20th November, 2013, IEEE Computer Society Press, 2013, pp. 187-190.
- \*Jaffry, S.W., and Treur, J., Modelling Trust for Communicating Agents: Agent-Based and Population-Based Perspectives. In: Jedrzejowicz, P., Nguyen, N.T., Hoang, K. (eds.), Proceedings of the Third International Conference on Computational Collective Intelligence, (ICCCI'11), Gdynia, Poland, September 21st – 23rd, 2011. Lecture Notes in Artificial Intelligence, Springer Verlag, 2011, pp. 366-377. [BEST PAPER AWARD]
- 14. \*Hoogendoorn, M., Jaffry, S.W., Maanen, P.P. van, and Treur, J., *Modeling and Validation of Biased Human Trust.* In: Boissier, O., et al. (eds.), Proceedings of the 11th IEEE/WIC/ACM International Conference on Intelligent Agent Technology, (IAT'11), Lyon, France, August 22nd 27th, 2011. IEEE Computer Society Press, 2011, pp. 256-263.
- \*Hoogendoorn, M., Jaffry, S.W., and Maanen, P.-P. van., Validation and Verification of Agent Models for Trust: Independent compared to Relative Trust. In: Proceedings of the 5th IFIP WG 11.11 International Conference on Trust Management. (TM'11), Copenhagen, Denmark, June 29th - July 1st, 2011. International Federation of Information Processing, Advances in Information and Communication Technology Series, Springer Verlag, 2011, vol. 358, pp. 35-50.
- \*Hoogendoorn, M., Jaffry, S.W., and Treur, J., Exploration and Exploitation in Adaptive Trust-Based Decision Making in Dynamic Environments. In: Huang, X.J., Ghorbani, A.A., Hacid, M.-S., Yamaguchi, T. (eds.) Proceedings of the 10th IEEE/WIC/ACM International Conference on Intelligent Agent Technology, (IAT'10), Toronto, Canada, August 31st - September 3rd, 2010. IEEE Computer Society Press, 2010, pp. 256-260.
- 17. \*Hoogendoorn, M., Jaffry, S.W., and Treur, J., *Incorporating Interdependency of Trust Values in Existing Models for Trust Dynamics*. In: Nishigaki, M., Josang, A., Murayama, Y., Marsh, S. (eds.), Trust Management IV, Proceedings of the 4th International Conference on Trust Management, Advances in Information and Communication Technology, (TM'10), Morioka, Iwate, Japan, June 16th 18th, 2010. Advances in ICT, vol. 321. Springer Verlag, 2010, pp. 263-276.
- 18. \*Both, F., Hoogendoorn, M., Jaffry. S.W., Lambalgen, R. van, Oorburg, R., Sharpanskykh, A., Treur, J., and Vos, M. de, Adaptation and Validation of an Agent Model of Functional State and Performance for Individuals. In: Yang, J.-J.; Yokoo, M.; Ito, T.; Jin, Z.; Scerri, P. (eds.), Proceedings of 12th International Conference on Principles of Practice in Multi-Agent Systems. (PRIMA'09), Nagoya, Japan, December 13th 16th, 2009. Lecture Notes in Artificial Intelligence, vol. 5925, Springer Verlag, 2009, pp. 595-607.
- \*Jaffry, S.W., and Treur, J., Comparing a Cognitive and a Neural Model for Relative Trust Dynamics. In: Leung, C.S., Lee, M., and Chan, J.H. (eds.), Proceedings of 16th International Conference on Neural Information Processing. (ICONIP'09), Bangkok, Thailand, December 1st - 5th, 2009. Lecture Notes in Computer Science, vol. 5863 Part I, Springer Verlag, 2009, pp. 72-83.
- 20. \*Hoogendoorn, M., Jaffry, S.W., and Treur, J., *Modeling Trust Dynamics from a Neurological Perspective*. In: Wang, R., Gu, F. (eds.), Advances in Cognitive Neurodynamics II, Proceedings of 2nd International Conference on Cognitive Neurodynamics. (ICCN'09), Hangzhou, China, November 15th 19th, 2009. Springer Verlag, 2011, pp. 523-536.

- 21. \*Hoogendoorn, M., Jaffry, S.W., and Treur, J., An Adaptive Agent Model Estimating Human Trust in Information Sources. In: Baeza-Yates, R., Lang, J., Mitra, S., Parsons, S., Pasi, G. (eds.), Proceedings of 9th IEEE/WIC/ACM International Conference on Intelligent Agent Technology, (IAT'09), Milan, Italy, September 15th - 18th, 2009. IEEE Computer Society Press, 2009, pp. 458-465.
- 22. \*Hoogendoorn, M., Jaffry. S.W., *The Influence of Personalities upon the Dynamics of Trust and Reputation*. In: Proceedings of International Symposium on Secure Computing (SecureCom'09), in conjunction with the IEEE International Conference on Privacy, Security, Risk and Trust, (PASSAT'09), Vancouver, Canada, August 29<sup>th</sup> 31<sup>st</sup>, 2009. IEEE Computer Society Press, 2009, pp. 263-270.
- 23. \*Bosse, T., Gerritsen, C., Hoogendoorn, M., Jaffry, S.W., and Treur, J., Comparison of Agent-Based and Population-Based Simulations of Displacement of Crime. In: Jain, L., Gini, M., Faltings, B.B., Terano, T., Zhang, C., Cercone, N., Cao, L. (eds.), Proceedings of 8th IEEE/WIC/ACM International Conference on Intelligent Agent Technology, (IAT'08), Sydney, Australia, December 9th 12th, 2008. IEEE Computer Society Press, 2008, pp. 469-476.
- 24. \*Hoogendoorn, M., Jaffry, S.W., and Treur, J., *Modeling Dynamics of Relative Trust of Competitive Information Agents.* In: Klusch, M., Pechoucek, M., Polleres, A. (eds.), Proceedings of 12<sup>th</sup> International Workshop on Cooperative Information Agents, (CIA'08), Prague, Czech Republic, September 10th 12th, 2008. Lecture Notes in Artificial Intelligence, vol. 5180, Springer Verlag, 2008, pp. 55-70.
- 25. \*Bosse, T., Gerritsen, C., Hoogendoorn, M., Jaffry, S.W., and Treur, J., *Agent-Based and Population-Based Simulation of Displacement of Crime* (extended abstract). In: Ghallab, M. (ed.), Proceedings of the 18th European Conference on Artificial Intelligence, (ECAI'08), Patras, Greece, July 21st—25th, 2008. IOS Press, 2008, pp. 877-878.
- \*Jaffry, S.W., Treur, J., Agent-Based and Population-Based Simulation: A Comparative Case Study for Epidemics. In: Proceedings of 22<sup>nd</sup> European Conference on Modeling and Simulation, (ECMS'08), Nicosia, Cyprus, June, 3rd – 6th, 2008. European Council on Modeling and Simulation, 2008, pp. 123-130.
- 27. Jaffry, S. W., Kayyani, U. R., FOSS Localization: A Solution for The ICT Dilemma of Developing Countries. In: Proceedings of 9th International IEEE MultiTopic Conference (INMIC'05), Karachi, Pakistan, December 24th 25th, 2005. pp. 1-5.
- 28. Jaffry, S. W., Pedagogical Pattern Language for in Time Student Confidence in Studied Material. In: Proceeding of 9th International IEEE MultiTopic Conference, (INMIC'05), Karachi (Pakistan), December 24th 25th, 2005. pp. 1-6.
- 29. Idrees, M., Yousaf, M. M., Jaffry, S. W., Pasha, M. A., Hussain, S. A., *Enhancements in AODV Routing Using Mobility Aware Agents*. In: Proceedings of IEEE International Conference on Emerging Technologies, (ICET'05), Islamabad, Pakistan, September, 16th 17th, 2005. pp. 98-102.

#### Poster Presentations in Conferences and Workshops

- Both, F., Hoogendoorn, M., Jaffry. S.W., Lambalgen, R. van, Oorburg, R., Sharpanskykh, A., Treur, J., and Vos, M. de, Validation of an Agent Model for Human Work Pressure. In: The 9th International Conference on Cognitive Modeling, (ICCM'09), Manchester, (United Kingdom), July 24th – 26th, 2009.
- 2. Hoogendoorn, M., Jaffry, S.W., and Treur, J., *Parameter Estimation for Human Trust in Information Sources* (Poster). In: Workshop on Parameter Estimation for Dynamical Systems (PEDS), Eindhoven, (The Netherlands), June 8th 10th, 2009.
- 3. Both, F., Hoogendoorn, M., Jaffry. S.W., Lambalgen, R. van, Oorburg, R., Sharpanskykh, A., Treur, J., and Vos, M. de, *An Approach to Validate an Agent Model for Human Work Pressure* (Poster). In:

Workshop on Parameter Estimation for Dynamical Systems (PEDS), Eindhoven, (The Netherlands), June 8th – 10th, 2009.

### Journal Reviews

- Knowledge-Based System, Elsevier B. V.
- Simulation Modelling Practice and Theory, Elsevier B. V.
- IEEE Intelligent Systems Journal, IEEE Computer Society Press.
- IEEE Transactions on Human-Machine Systems, IEEE Systems, Man, and Cybernetics Society.
- IEEE Access, IEEE.
- Complex Adaptive Systems Modeling, Springer Verlag.
- International Journal of Computer Mathematics, Taylor & Francis.
- Multi-agent and Grid Systems an International Journal, IOS Press.
- Data, Multidisciplinary Digital Publishing Institute MDPI.
- Computers, Multidisciplinary Digital Publishing Institute MDPI.
- Mathematical and Computational Applications, Multidisciplinary Digital Publishing Institute MDPI.
- Machine Learning and Knowledge Extraction, Multidisciplinary Digital Publishing Institute MDPI.

# Conference Program Committee (PC) Membership

- International Conference on Simulation and Modeling Methodologies, Technologies and Applications (SIMULTECH 2015, 2016, 2017, 2018)
- International Conference on Frontiers of Information Technology (FIT' 2012, 2013, 2014, 2015, 2016, 2017, 2018).
- IEEE International Conference on Open Source Systems & Technologies (ICOSST 2014, 2015, 2017, 2018)
- International Conference on Advancements in Computational Sciences (ICACS' 2018, 2019)
- International Conference on Intelligent Control and Computing (ICICC' 2019)
- KUST International Conference on Computer Architecture and Algorithms (CAA 2015)
- International Workshop on Trust in Agent Societies (TRUST 2012, 2013, 2014, 2015).
- International Neural Network Society Symposium on Emerging Digital Media (INNS SoEDM 2014)
- Conference on Information Assurance and Cyber Security (CIACS 2014, 2015)
- The 6th IFIP WG 11.11 International Conference on Trust Management (IFIPTM 2012).
- International Conference on Data Technologies and Applications (DATA 2012).
- International Workshop on Trustworthy Multi-Agent Systems (TruMAS 2012).
- International Workshop on Trusted Communications in Decentralized Computing (TCDC 2010).

# International Conference and Workshop Reviews

- International Conference on Intelligent Agent Technology (IAT'10, IAT'11)
- International Conference on Autonomous Agents and Multiagent Systems (AAMAS'10, AAMAS'11)
- International Conference on Industrial Engineering & Other Applications of Applied Intelligent Systems (IEA/AIE'10)
- International Conference on Practical Applications of Agents and Multi-Agent Systems (PAAMAS'10)
- International Workshop on Trusted Communications in Decentralized Computing (TCDC 2010)
- European Conference on Artificial Intelligence (ECAI'09)
- International Workshop on Multi-Agent Based Simulation (MABS'09)

# PROJECTS AND FUNDING

- 2018 2021 Principal Investigator, *Agent-based Computational Modeling Lab*, National Center of Artificial Intelligence, funded by the Higher Education Commission of Pakistan, value PKRS 100,000,000/- approx.
- 2017 2020 Principal Investigator, Research Project, *Design and Evaluation of Humanistic Driver Agent*, funded by the Higher Education Commission of Pakistan under National Research Grant for Universities (NRPU), value PKRS 4,938,000/-.
- 2017 2018 Principal Investigator, Undergraduate Final Year Project tilled, *Information Extraction from Research Articles*, funded by National Information and Communication Technology Research and Development (ICT RnD) Fund, value PKRS 80,000/-.
- 2017 2018 Principal Investigator, Undergraduate Final Year Project tilled, *Virtual Reality Tutor Simulator*, funded by National Information and Communication Technology Research and Development (ICT RnD) Fund, value PKRS 70,000/-.
- 2017 2018 Principal Investigator, Undergraduate Final Year Project tilled, *Design and Evaluation of Autonomous Vehicle using Virtual Reality*, funded by National Information and Communication Technology Research and Development (ICT RnD) Fund, value PKRS 70,000/-.
- 2017 2018 Principal Investigator, Undergraduate Final Year Project, *Design of Software for Ergonomic Hazard Detection to Computer Users*, funded by University of the Punjab Research Support Fund, value PKRS 150,000/-.
- 2015 2016 Principal Investigator, Undergraduate Final Year Project tilled, *Electroid Smart Homes*, funded by National Information and Communication Technology Research and Development (ICT RnD) Fund, value PKRS 80,000/-.
- 2015 2016 Principal Investigator, Undergraduate Final Year Project tilled, *Prediction System Based on Analytics for Library Data*, funded by National Information and Communication Technology Research and Development (ICT RnD) Fund, value PKRS 65,000/-.
- 2014 2015 Principal Investigator, Undergraduate Final Year Project, Social Experimentation with a Social Media Agent, funded by University of the Punjab Research Support Fund, value PKRS 150,000/-.
- 2014 2015 Principal Investigator, Undergraduate Final Year Project tilled, *Virtual Reality Powered Driving Tutor*, funded by National Information and Communication Technology Research and Development (ICT RnD) Fund, value PKRS 90,000/-.
- 2014 2015 Principal Investigator, Undergraduate Final Year Project tilled, Learning Optimal Driver Personality Profile, funded by National Information and Communication Technology Research and Development (ICT RnD) Fund, value PKRS 35,000/-.
- 2014 2015 Principal Investigator, Undergraduate Final Year Project tilled, *Defend and Destroy Warcraft Strategy Game*, funded by National Information and Communication Technology Research and Development (ICT RnD) Fund, value PKRS 28,000/-.
- 2014 2015 Principal Investigator, Undergraduate Final Year Project tilled, *Technology for Litigation*, funded by National Information and Communication Technology Research and Development (ICT RnD) Fund, value PKRS 35,000/-.
- 2013 2014 Principal Investigator, Undergraduate Final Year Project tilled, *Human Acceptance of Autonomous Social Media Agent*, funded by National Information and Communication Technology Research and Development (ICT RnD) Fund, value PKRS 40,000/-.

- 2013 2014 Principal Investigator, Undergraduate Final Year Project, 3D Visualization of Search Engine, funded by National Information and Communication Technology Research and Development (ICT RnD) Fund, value PKRS 36,250/-.
- 2013 2014 Principal Investigator, UG Capstone Project, Empirical Validation of Model for Human Decision Making, funded by University of the Punjab Research Support Fund, value PKRS 150,000/-.
- 2012 2013 Principal Investigator, *Human Resource Development for Data Mining and Text Analytics Grant*, funded by PolyVista, Inc Houston, TX 77057, USA, value PKRS 1,000,000/-.
- 2012 2013 Principal Investigator, Undergraduate Final Year Project, Automated Scientific Literature Acquisition for Systematic Literature Review, funded by University of the Punjab Research Support Fund, value PKRS 150,000/-.
- 2012 2013 Principal Investigator, Undergraduate Final Year Project tilled, Unsupervised Deception Detection in Text, funded by National Information and Communication Technology Research and Development (ICT RnD) Fund, value PKRS 28,750/-.
- 2012 2013 Principal Investigator, Undergraduate Final Year Project, Validation of Trust based Human Decision Making, funded by National Information and Communication Technology Research and Development (ICT RnD) Fund, value PKRS 82,550/-.
- 2004 2005 Principal Investigator, *Urdu Linux Localization Project*, Research and Development Project of Free and Open Source Software Foundation of Pakistan (FOSSFP).

## SUPERVISED/ UNDER SUPERVISION PROJECTS/THESES

### PhD Candidates under Supervision

2014 - 2018

- 1. PHDCSF13M004 Mian Muhammad Mubasher, Design and Evaluation of Humanistic Driver Agent.
- 2. PHDCSF13M002 Asif Sohail, Adaptive Blocking and Parameter Configuration for Record Linkage.
- 3. PHDCSF16M002 Zara Nasar, Information Extraction from Full Length Scientific Articles.
- 4. PHDCSF14M501 Bilal Shahzad, working on thesis topic.

#### Graduate (MPhil) Thesis under Supervision

- 1. MSCSF17M002 Alisha Younas, "Design of Hierarchical Human Driver Behavior Model".
- 2. MSCSF17M005 Faiza Javed, "Modeling of Driver Behavior in Anger".
- 3. MSCSF17M006 Qura-tul-Ain Nafees, "Modelling of Driver's Honking Behavior".
- 4. MSCSF17M022 Aqsa Chaudhary, "Incorporation of Human Factors in Mixed Traffic Model".
- 5. MSCSF17M028 Bisma Arshad, "Modeling of Driver's Perception using Fuzzy Modeling".
- 6. MSCSF17M041 Wajiha Batool, "Incorporation and Analysis of Task Difficulty in Microscopic Driver Behavior Model".
- 7. MSCSF15M007 Abeera Aslam, "Quality Assessment of Wikipedia Articles".
- 8. MSCSF15M009 Shahmin Sharafat, "Classification Based Information Extraction from Law Proceedings".
- 9. MSCSF15M010 Maria Khurshid, "Multi-agent Modeling and Simulation for Pedestrian Movement in an Urban Environment".
- 10. MSCSF15M036 Muhammad Waqas Riaz, "Implementation and Validation of Social Agent".

#### Graduate (MPhil) Thesis Supervised

2017 - 2018

1. MSCSF15M008 – Usama Nawaz, "Implementation and Validation of Framework for Location Based Social Network".

### 2016 - 2017

- 2. MSCSF14M509 Afnan Iftakhar, "Mining Information from Criminal Proceedings of the Lahore High Court Pakistan".
- 3. MSCSF14M029 Mufrah Naveed, "Modeling of Neurotic Personality Trait of Pedestrians in Panic Situation".
- 4. MSCSF14M023 Maria Javiad, "A Generalized Framework for Modeling of Collective Intelligence".
- 5. MSCSF13M040 Ainee Ejaz Mirza, "Modeling of Text Complexity in Science Textbooks of Primary Classes".

#### 2015 - 2016

- 6. MSCSF14M005 Zara Nasar, "Information Mining from Research Papers".
- 7. Ali Hussain Khan -"Design of a Creative Agent".

# 2014 - 2015

- 8. MSCSF13M001 Hafiza Baseerat Fatima, "Design and Analysis of a Social Agent".
- 9. MSCSF13M025 Huma Shoaib, "Associating Sentiments with Images".
- 10. MSCSF06M009 Anzar Ahmad, "An Investigation on Cast Based Agent Oriented Programming (CBAOP) Language Design and Implementation".

#### 2013 - 2014

- 11. MSCSF11M002 Bilal Shahzad, "Data Visualization for Social Networks".
- 12. MSCSF11M017 Imran Latif, "Fostering Readers Trust on Wikipedia through Behaviour Analysis of Wikipedia Editors".

#### 2012 - 2013

- 13. MSCSF11M013 Mian Muhammad Mubasher, "A Multi-agent Model for Realistic Urban Traffic Flow Simulation".
- 14. MSGSF10M003 Muhammad Haris, "Design of a Conceptual Framework for Location Based Social Networking".

# Undergraduate (BS/M.Sc.) Projects under Supervision

2018 - 2019

N. A.

# Undergraduate (BS/M.Sc.) Projects Supervised

2017 - 2018

- 1. Mahnoor Saeed, Seemab Akbar, Jazib Humayun, Aleena Rashid, "Technology for Law".
- 2. Syed Rizwan Ali, "Ludo Game Server".
- 3. Usman Liaqut, Robbia Gulnar, Rabeea Rehman, Ather Rafiq, "Virtual Reality Powered Driving Tutor".
- 4. Syeda Tayyaba Bukhari, Hifsa Tanveer, Ayesha Yamin, Kissa Tanvir, Dur e Nayab, "Automation of PU Examination System"

- 5. Fariha Khan, Syed Rehan Haider, Iqra Tehseen, Waqar Ali, Alisha Younas, "Legal Data Mining".
- 6. Mubeen, Zubair Dar, "Productivity Logger".

- 7. Ayesha Saleem, Maryam Iqbal, "Driver Assistant".
- 8. Muhammad Shazim Khan, Seemal Afzal, Muhammad Ali, "Meeting Minute Recorder".
- 9. Moin Rajput, Ahsan Masood, Muhammad Moeen, Danish Hashmi, Muhammad Umair Rauf, "Virtual Reality Powered Car Driving Serious Game".
- 10. Hamza Pervez, Muhammad Usman, Ali Raza, "Parental Observation Device for Young Drivers Using CAN Bus and Raspberry Pi".
- 11. Hisham Asghar, Muhammad Tayyab Tariq, Aleena Raza, "Student Social Media Network".
- 12. Waqas Iftikhar, Muhammad Awais, "Student Career Counseling Portal".
- 13. Rohaan Ali, Umair Bin Aaslam, Muhammad Umer, Khurram Raza, "E Voting".
- 14. Sabah Fiaz, Aniqa Khalid, Tooba Nasim, Amina Ameen, Maryam Bashir, "Automation of PUCIT General Request Form".
- 15. Zaid Sarfraz, Umer Nadeem, Dawood Bin Sadaqat, Mehtab Khan, "CAN Bus Powered Fleet Management System".
- 16. Tayyab Nasir, "Low Cost Pharmacy".
- 17. Husnain Aslam, Babar Saleh Hayat, Shakeel Ahmad, "Concurrent Version System and Literation Review Assistant Extension and Deployment".
- 18. Adnan Ahmad Bhatti, Fariha Aslam, Komal Saif, "Traffic Simulation Development Environment".
- 19. Iqra Aslam, Anum Waheed, Mahnoor Mazhar, Rabeea Arshad, "Learning Management System (Moodle) Extension and Deployment".
- 20. Muhammad Usman Malik, Zubair Hassan, , Muhammad Khan, "Scale OCR based Survey Form Automation"
- 21. Muhammad Khan, Muhammad Fakhar, Ijaz Shafi, Rana Adnan, "PUCIT Entry Test Automation"
- 22. Qurat Ul Ain Fatima, Zarnab Ikram, "Zotero Server Extension and Deployment"
- 23. Hammad Ahmad Qadri, "National Digital Research Repository".

- 24. Hafiz M. Farooq, M. Farhan Mughal, M. Zikria Bashir, "Library Books Circulation and Prediction".
- 25. Iqra Mirza, Talia Riaz, "Scrum Evaluator".
- 26. Fatima Asif, Aqiba Javed, Iqra Arif, "Learning of Optimal Driver Personality Profile".
- 27. Areeba Moin, Hassan Tahir, Zahid Mehmood, "Kinect Based Ergonomics Application for Computer Users".
- 28. Syed Furqan Haider, Nazia Sadiq, Junaid Ch., Farhan Aamir, "Car Scanner OBD-II".
- 29. Nabeel Afzal, Mirat Ul Amina, "Portal for public services in Pakistan (HowTo.pk)".
- 30. Muhammad Ahmad, Asher Toqeer, Abdul Rahman, Saqib Mirza, "EasyMobile: A Mobile Application".
- 31. Uzair Aslam, M. Hassan Riaz, M. Usama Khalid, Abdul Mateen, S. Ali Mughees Mehdi, "Electroid".
- 32. Hafiz Sameeullah, Nauman Sharif, Umer Mehmood, Jahangeer Rana, "DRRS Digital Research Repository".
- 33. Shaheryar Ahmed, Shehraz Khan, Hamza Shafique, Ali Zuhaib, "National Data Visualization".
- 34. Nimra Gulshan, Ayesha Riaz (Eraj Minal), Sameea Fatima, Rabia Riaz, "Technology for Litigation System".
- 35. Waqas Yousaf, Nouman Asif, Fahad Rafi, Mahad Mughal, Sohail Shaukat, "Audit Wheel".
- 36. Zia-Ul-Rehman, Naeem Ur Rehman, Hafiz Muhammad Hamza Asghar, "LoBaRs".
- 37. Muhammad Usman, Farhan Ahmad, Adeel Waheed, Syed Asad Shah, Muhammad Faraz, "Student Social Network."

#### 2014 - 2015

- 38. Aamir Bhatti, Ahsan Hayat, Safiyan Zulfiqar, Gohar Ali, "Virtual Reality Powered Driving Tutor".
- 39. Awais Cheema, Maida Fatima, Ali Zaib, Zeeshan Sabir, "Defend and Destroy Warcraft Strategy Game".
- 40. Tasadduq Ali, Abdullah Tariq, Muazzam Abbas, Wasif Saeed, "Technology for Litigation".
- 41. Mukkarram ur Rehman, Irfan Farooq, Hammad Zahid, Mshood Alam, Umer Hayat, Misbah Ali, Junaid Sarfraz, "Technology for Research".
- 42. Ramshah Jahangir, "Learning Optimal Driver Personality Profile".

#### 2013 - 2014

- 43. Awais Asghar, "Digital Research Repository Scraper".
- 44. Arslan Ihsan, "Tracebook",
- 45. Hafiz Mujadid Khalid, "Intelligent Literature Review Assistant".
- 46. Ammarah Ijaz, M. Anas Khan, "Social Agent".
- 47. Muhammad Rehan, Sundas Saif, "Version Control System for Multimedia Files".
- 48. Haider Ali, Muhammad Umair, "Virtual Psychiatrist".
- 49. Zia Ur Rehman Kiyani, "3D Search Engine".
- 50. Shmeel Ahmed, "Vehicular Traffic Flow Scenario Development Environment".

#### 2012 - 2013

- 51. Fahad Majeed, Hamad Hassan, Muhammad Usman, "Online Social Network Portal for Researchers".
- 52. Amjad Afzaal, Muhammad Tauseef, "Web mining for Research and Researchers".
- 53. Rafay Ahmad, Asim Arshad, Fakhar Uz Zaman, Ahsan Ejaz, "National Data Visualization".
- 54. Fahad Mansoor, Muhammad Rohail, "Empirical Validation of Decision Making in Uncertain Environment".
- 55. Bilal Ahmad Yaseen, "Automated Scientific Literature Acquisition for Systematic Literature Review".
- 56. Hira Zaidi, "Identification of Deception from Text".
- 57. Zara Nasar, "Mining NEWS Effects on General Public Opinion"
- 58. Sara Riaz, "Sentiment Analysis with Visual Text Summarization"
- 59. Amina Mirza, "Extending Social Network using Public Tweets"
- 60. Syed Muhammad Junaid, "Opinion Mining and Sentiment Analysis".
- 61. Osama Jameel Ahmad, "NEWS Miner from Twitter Streams".
- 62. Abdul Rauf Saeed, "Intelligent Information Retrieval from Quran and Hadith text".
- 63. Muhammad Bhasham, "Virtual Tutor".
- 64. Ali Farzan, "Visualization of Web".
- 65. Sami Atiq, "Internet Footprint Finder".
- 66. Samina Saleem, "Web Visualizer".

- 67. M. Waseem Latif, Muhwish Rathore, "Intelligent Customized Information Retrieval Agent for Web".
- 68. M. Rizwan Asghar, "Service Oriented Computing Interface (SOCI) for Legacy Systems".
- 69. Fayyaz Khan Lodhi, Zaheer Ahmad, "Electronic Government Service Manager for Service (EGSM) Oriented Computing Model of E-Government".

- 2004 2005
  - 70. Touseef Liaquat, "Machine Learning for Multi-Agent Systems".
  - 71. Mohsin Mahmood, M. Ahsan, M. Azeem Yousaf, H. Abdul Shakoor, "Urdu English Lexicon".
  - 72. Fahad Akhtar, M. Kashif, Qasim Ali, Shehzad Amin, "Urdu Language Morphological Guesser".

## **UNIVERSITY TEACHING**

2012 - 2018	Computational Modeling to graduated and postgraduate classes at Punjab University College of
	Information Technology, University of the Punjab, Lahore, Pakistan.

- 2013 2018 Topics in Artificial Intelligence to graduate and postgraduate classes at Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan.
- 2017 2018 Bioinformatics and Artificial Intelligence to postgraduate classes at Institute of Biochemistry and Biotechnology, University of the Punjab, Lahore, Pakistan.
- 2013 2017 Data Mining and Information Retrieval to graduate and postgraduate classes at Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan.
- 2015 2017 *Introduction to Computing* to undergraduate classes at Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan.
- 2013 2015 *Managing Information* to postgraduate classes at Institute of Communication Studies, University of the Punjab, Lahore, Pakistan.
- 2012 2014 *Introduction to Artificial Intelligence* to undergraduate classes at Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan.
- 2012 2013 Research Methods in Information and Computational Sciences to graduated and postgraduate classes at Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan.
- 2010 2011 Advance Programming to under-graduated class at Department of Computer Science, VU University, Amsterdam, The Netherlands.
- 2009 2010 Organizational Dynamics using LeedsTo language to graduated class at Department of Artificial Intelligence VU University, Amsterdam, The Netherlands.
- 2008 2009 Dynamics of Behavior using LeedsTo language to graduated class at Department of Artificial Intelligence VU University, Amsterdam, The Netherlands.
- 2006 2007 Introduction to Artificial Intelligence to undergraduate classes at Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan.
- 2004 2006 System Programming in LINUX using C/C++ languages to undergraduate classes at Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan.
- 2003 2004 Data Structures and Algorithms using C++ language to undergraduate and postgraduate classes at Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan.
- 2002 2003 Object Oriented Programming using C++ language to undergraduate and postgraduate classes at Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan.
- 2001 2002 Introduction to Programming Concepts using C language to undergraduate classes at Punjab University College of Information Technology, University of the Punjab, Lahore, Pakistan.

# ADMINISTRATIVE AND ADVISORY DUTIES AT NATIONAL LEVEL:

- 2012 to date PhD Approved Supervisor, Higher Education Commission (HEC), Islamabad, Pakistan.
- 2015 to date *Evaluator*, Research Funding Proposals of National Information and Communication Technology Research and Development (ICTRnD) Fund, Islamabad, Pakistan.
- 2017 to date *Program Evaluator*, National Computing Education Accreditation Council (NCEAC), Higher Education Commission (HEC), Islamabad, Pakistan.
- 2017 to date *Member Board of Studies*, Department of Computer Science and Information Technology, University of Engineering and Technology, Peshawar, Pakistan.
- 2018 to date *Director*, National Agent-based Computational Modeling Laboratory, National Center of Artificial Intelligence (NCAI), Pakistan.
- 2018 to date Member Judging Panel, National Grassroots ICT Research Initiative (NGIRI), Ignite, National Information and Communication Technology Research and Development (ICTRnD) Fund, Islamabad, Pakistan.
- 2015 2016 External Examiner, MPhil Computer Science, Government College University (GCU), Lahore, Pakistan.
- 2013 2014 External Examiner, Bachelor of Science in Computer Science, COMSATS Institute of Information Technology (CIIT), Lahore, Pakistan.

### ADMINISTRATIVE, CO AND EXTRA CURRICULAR DUTIES AT UNIVERSITY LEVEL:

- 2012 to date *Head*, PUCIT Artificial Intelligence and Multidisciplinary (AIM) Research Laboratory, Lahore, Pakistan.
- 2012 to date Degree Coordinator, PUCIT PhD Computer Science Program, Lahore, Pakistan.
- 2012 to date Degree Coordinator, PUCIT MPhil Computer Science Program, Lahore, Pakistan.
- 2012 to date *Degree Coordinator*, PUCIT MPhil Remote Sensing and Geographical Information Systems Program, Lahore, Pakistan.
- 2012 to date Secretary, of Departmental Doctoral Program Committee (DPCC), PUCIT, Lahore, Pakistan
- 2012 to date Member, College Council, PUCIT, Lahore, Pakistan
- 2012 to date Member, Research Advisory Committee, PUCIT, Lahore, Pakistan
- 2012 to date Member, Admission Committee, PUCIT, Lahore, Pakistan
- 2013 to date Secretary, PUCIT Graduate Financial Support Review Committee (GFSRC), at PUCIT, Lahore, Pakistan
- 2013 to date Secretary, PUCIT NCEAC Accreditation Committee.
- 2017 to date *Member*, Committee to Propose Rules and Regulations for the Establishment of PUCIT Center for Entrepreneurship at PUCIT, Lahore, Pakistan.
- 2017 to date *Chair*, Committee for Organizing Meeting with PUCIT Alumni CEO's at PUCIT, Lahore, Pakistan.
- 2017 to date *Chair*, Committee for Organizing PUCIT Alumni Annual Dinner at PUCIT, Lahore, Pakistan.
- 2017 to date PUCIT Focal Person, National Grassroots ICT Research Initiative, Ignite National ICT RnD Fund.
- 2018 to date *Director*, National Center for Artificial Intelligence (NCAI), University of the Punjab, Lahore, Pakistan.

2018 – to date	Chairperson, Purchase Committee for Central Development Working Party (CDWP) approved project NCAI, University of the Punjab, Lahore, Pakistan.
2018 – to date	Member, University Ranking Committee, University of the Punjab, Lahore, Pakistan.
2017 – 2018	Member, Committee Resolve the promotion and other allied issues of the Faculty Members Working under Tenure Track System (TTS), University of the Punjab, Lahore, Pakistan.
2014 – 2017	Chief Organizer, National Software Competition and Exhibition (SoftExpo 2014, 15, 16, 17) at PUCIT, Lahore, Pakistan.
2015 – 2017	Chief Organizer, National Gradate Research Symposium (GRS 2015, 16, 17) at PUCIT, Lahore, Pakistan.
2013 - 2017	Faculty Advisor, PUCIT ACM Student Chapter, Lahore, Pakistan.
2012 - 2013	Secretary, Admission Process Review Committee at PUCIT, Lahore, Pakistan.
2012 - 2013	Secretary, Research Advisory Committee at PUCIT, Lahore, Pakistan.
2001 - 2007	Head/Chairman, Computer Society at PUCIT, Lahore, Pakistan.
2002 - 2007	Secretary, Curriculum Development Committee at PUCIT, Lahore, Pakistan.
2006 – 2007	Member of Board of Studies, University of the Punjab for the Subject of Computer Science and Information Technology.
2006 - 2007	Member, PUCIT Scholarship Committee, Lahore, Pakistan.
2006 - 2007	Member, PUCIT Internal Faculty Search Committee.
2003 – 2006	Knowledge Mentor, Subjects of Programming Concepts, Object Oriented Programming, Data Structures and System Programming at PUCIT, Lahore, Pakistan.
2005 - 2006	Member, Distributed Computing Research Centre (DCRC) at PUCIT, Lahore, Pakistan.
2005 - 2006	Undergraduate and Postgraduate semester Coordinator at PUCIT, Lahore, Pakistan.
2003 - 2005	Degree In-charge, B. Sc. (Honors) Degree in Computer Science at PUCIT, Lahore, Pakistan.
2004 - 2005	Patron, PUCIT Electronic Magazine COMPUTING.
2005 – 2005	Coordinator, FOSSAC'05, 1st National Free and Open Source Software Awareness Campaign held on 16-19 August 2005, Punjab University Lahore, Pakistan.
2002 - 2004	Postgraduate Degree Project Coordinator, PUCIT, Lahore, Pakistan.
2002 – 2003	<i>In-charge,</i> SoftComp–I and SoftComp–II, Conducted SoftComp, 1st and 2nd PUCIT Computer Science Contest that constitutes Software, Programming and Quiz competitions.

### CONFERENCES/WORKSHOPS/COURSES, ORGANIZED/PARTICIPATED/ATTENDED:

# Talks, Conferences, Workshops, Summer Schools, Courses and Tutorials

#### Organized

- 1. Half-day Workshop on Data Mining and Machine Learning using WEKA (DMML'18), May 14th, 2018 at Artificial Intelligence and Multidisciplinary (AIM) Research Lab, Punjab University College of Information Technology (PUCIT), University of the Punjab, Lahore, Pakistan.
- 2. 1st National Workshop on Agent Based Modeling and Simulation (ABMS'17), December 22nd, 2017 at Artificial Intelligence and Multidisciplinary (AIM) Research Lab, Punjab University College of Information Technology (PUCIT), University of the Punjab, Lahore, Pakistan.
- 3. 3<sup>rd</sup> National Computer Science Graduate Research Conference (GRC'2017) at Punjab University College of Information Technology, University of the Punjab, Lahore on May 13-14, 2017.
- 4. 5th National Software Completion and Exhibition (SOFTEXPO'2017) at Punjab University College of Information Technology, University of the Punjab, Lahore on May 13-14, 2017.

- 5. 2<sup>nd</sup> National Computer Science Graduate Research Symposium (GRS'2016) at Punjab University College of Information Technology, University of the Punjab, Lahore on May 21-22, 2016.
- 6. 4th National Software Completion and Exhibition (SOFTEXPO'2016) at Punjab University College of Information Technology, University of the Punjab, Lahore on May 21-22, 2016.
- 7. 1st National Computer Science Graduate Research Symposium (GRs'2015) at Punjab University College of Information Technology, University of the Punjab, Lahore on May 22-23, 2015.
- 8. 3<sup>rd</sup> National Software Completion and Exhibition (SOFTEXPO'2015) at Punjab University College of Information Technology, University of the Punjab, Lahore on May 22-23, 2015.
- 9. 2nd National Software Completion and Exhibition (SOFTEXPO'2014) at Punjab University College of Information Technology, University of the Punjab, Lahore on June 13, 2014.
- 10. 1st National Software Completion and Exhibition (SOFTEXPO'2013) at Punjab University College of Information Technology, University of the Punjab, Lahore on June 22, 2013
- 11. 1st National Conference on Trends and Practices of Free and Open Source Software Technologies (TPFOSST'05), August 18th 19th, 2005, at PUCIT, Lahore, Pakistan.
- 12. 1st Student Conference on Computer Science Spring 2004 (SCCS'04), June 22<sup>nd</sup> 24<sup>th</sup>, 2004 at Punjab University College of Information Technology Lahore, Pakistan.
- 13. PUCIT Second In-house Software Competition (SoftComp–II), January 24th 25th, 2003 at Punjab University College of Information Technology Lahore, Pakistan.
- 14. PUCIT First In-house Software Competition (SoftComp–I), June 8th, 2002 at Punjab University College of Information Technology Lahore, Pakistan.

#### **Participated**

- Presented, Tutorial on "Agent based Modeling and Social Simulation", at International Conference on Advancements in Computational Sciences (ICACS'18), February 21st, 2018 at the University of Lahore, Lahore, Pakistan.
- 2. Participated, Workshop on e-services Composition and Development in the Cloud (W-Codec2017), December 27<sup>th</sup> 28<sup>th</sup>, 2017 at School of Science and Engineering, Lahore University of Management Sciences (LUMS), Lahore, Pakistan.
- 3. Presented, Invited Talk on "Intelligent Transportation System", December 18th 20th, 2017 at Al-Khawarizmi Institute of Computer Science, University of Engineering and Technology, Lahore, Pakistan.
- 4. Presented, Invited Talk on "Computational Thinking and its Role in Scientific Discovery", October 27th, 2017 at Center for High Energy Physics, University of the Punjab, Lahore, Pakistan.
- 5. Presented, Invited Talk on "Science through Computational Modeling and Simulation", International Conference on Communication, Computing and Digital Systems, (CCODE'17), March 8th 9th, 2017 at Bahria University, Islamabad, Pakistan.
- 6. Participated, IEEE 20th International Multi-topic Conference (INMIC 2017), November 25<sup>th</sup> 26<sup>th</sup>, 2017 at National University of Computer and Emerging Sciences (NUCES-FAST), Lahore, Pakistan.
- 7. Presented, Tutorial on "Computational Modeling", December 16<sup>th</sup> 18<sup>th</sup>, 2014 at Serina Hotel, Islamabad, Pakistan.
- 8. Participated, Third International Conference on Computational Collective Intelligence, (ICCCI'11), September 21st 23rd, 2011 at Academia Moraska, Gdynia, (Poland).
- 9. Participated, 11<sup>th</sup> IEEE/WIC/ACM International Conference on Intelligent Agent Technology. (IAT'11), August 22<sup>nd</sup> 25<sup>th</sup>, 2011, Campus de la Doua, Lyon, France.
- 10. Participated, 5<sup>th</sup> International Conference on Trust Management Advances in Information and Communication Technology, (TM'11), June 29<sup>th</sup> July 1<sup>st</sup>, 2011, Technical University of Denmark (DTU), Copenhagen, Denmark.

- 11. Participated, 10th IEEE/WIC/ACM International Conference on Intelligent Agent Technology. (IAT'10), August 31st September 3rd, 2010, York University, Toronto, Canada.
- 12. Participated, 4th International Conference on Trust Management Advances in Information and Communication Technology (TM'10), June 16th 18th, 2010, Morioka, Iwate, Japan.
- 13. Participated, 12th International Conference on Principles of Practice in Multi-Agent Systems (PRIMA'09), December 13th 16th, 2009 at Nagoya Congress Center, Nagoya, Japan.
- 14. Participated, 16th International Conference on Neural Information Processing (ICONIP'09), December 1st 5th, 2009 at Windsor Suites Hotel Bangkok, Bangkok, Thailand.
- 15. Participated, Second International Conference on Cognitive Neurodynamics (ICCN'09), November 15th 19th, 2009 at Days Hotel Hangzhou, Hangzhou, China.
- 16. Participated, International Symposium on Secure Computing (SecureCom'09), in conjunction with the IEEE International Conference on Privacy, Security, Risk and Trust, (PASSAT'09), August 29th 31st, 2009 at Vancouver, Canada.
- 17. Participated, 9th International Conference on Cognitive Modeling (ICCM'09), July 24th 26th, 2009 at University of Manchester, Manchester, United Kingdom.
- 18. Participated, Workshop on Parameter Estimation for Dynamical Systems (PEDS), June 8<sup>th</sup> 10<sup>th</sup>, 2009 at European Institute for Statistics, Probability, Stochastic Operations Research and its Applications (EURANDOM) Technical University Eindhoven, The Netherlands.
- 19. Participated, 3<sup>rd</sup> International School "DECOI 2009: Design of Collective Intelligence, February 23<sup>rd</sup> 27<sup>th</sup>, 2009 at the Lorentz Center, Leiden, The Netherlands.
- 20. Participated, 12<sup>th</sup> International Workshop on Cooperative Information Agents (CIA'08), September 10<sup>th</sup> 12<sup>th</sup>, 2008 at Czech Technical University, Prague, Czech Republic.
- 21. Participated, 22<sup>nd</sup> European Conference on Modeling and Simulation (ECMS'08), June 3<sup>rd</sup> 6<sup>th</sup>, 2008 at University of Cyprus, Nicosia, Cyprus.
- 22. Participated, International Conference on E-Governance: A Catalyst for Change (ICEG'05), December 9th 11th, 2005, at LUMS, Lahore, Pakistan.
- 23. Participated, CIIT Workshop on Research in Computing Spring 2005 (CWRC'S05), April 2005, at COMSATS, Abbottabad, Pakistan.

#### Attended

- Attended, Lecture on Kinematics and Dynamics of Mobile Robots, October 15th, 2018 at Department of Electrical Engineering, School of Science and Engineering, Lahore University of Management Sciences (LUMS), Lahore, Pakistan.
- 2. Attended, 15th Workshop on Field and Assistive Robotics (WPAF), October 13th, 2018 at National Agriculture Robotics Laboratory, National Center for Robotics and Automation, Lahore University of Management Sciences (LUMS), Lahore, Pakistan.
- 3. Attended, 4th Workshop on Precision Agriculture and Forestry (WPAF), October 12th, 2018 at National Agriculture Robotics Laboratory, National Center for Robotics and Automation, Lahore University of Management Sciences (LUMS), Lahore, Pakistan.
- 4. Attended, Conversations on Deep Learning Lecture, October 11th, 2018 at Department of Electrical Engineering, School of Science and Engineering, Lahore University of Management Sciences (LUMS), Lahore, Pakistan.
- 5. Attended, International Conference on Advancements in Computational Sciences (ICACS'18), February 19th 21st, 2018 at the University of Lahore, Lahore, Pakistan.
- 6. Attended, 1st International Meeting on Science and Society (IMSS-I), November 23<sup>rd</sup> 25<sup>th</sup>, 2017 at Center for High Energy Physics, University of the Punjab, Lahore, Pakistan.

- 7. Attended, 4th e-Learning and Distance Education Conference (ELDEC 2017), November 20th 21st, 2017 at Virtual University of Pakistan, Lahore, Pakistan.
- 8. Attended, 9th International Conference on Information and Communication Technology and Development (ICTD 2017), November 16<sup>th</sup> 19<sup>th</sup>, 2017 at Avari Hotel, Lahore, Pakistan.
- 9. Attended, Two days training workshop on Structural Equation Modeling using AMOS, September 28th 29th, 2017 at COMSATS Institute, Islamabad, Pakistan.
- 10. Two days' Workshop on Patent Filing and Introduction to Intellectual Property System of Pakistan, May 17th 18th, 2017 at Kharana Hall, Institute of Chemistry, University of the Punjab.
- 11. Attended, International Workshop on Science Communication Portfolio: A Guide to Create Communication Materials that Complement Science, January 10<sup>th</sup> 11<sup>th</sup>, 2017 at COMSTECH, Islamabad, Pakistan.
- 12. Attended, 4th One Week In-Service Faculty Training Program, November 21st 25th, 2016 at Department of Microbiology and Molecular Genetics (MMG), University of the Punjab, Lahore, Pakistan.
- 13. Attended, 13th International Conference on Frontiers of Information Technology, (FIT 2015), December 16th 18th, 2015 at Serina Hotel, Islamabad, Pakistan.
- 14. Attended, 5th International Multidisciplinary Conference, September 14th 16th, 2015 at Imperial College of Business Studies, Lahore, Pakistan.
- 15. Attended, Conference on Emerging Technologies Redefining Governance in Information Age, May 14th, 2015 at Arfa Software Technology Park, Lahore, Pakistan.
- 16. Attended, Tutorial on "Complex Network Design From Interaction Data in Complex Systems", December 18th, 2014 at Serina Hotel, Islamabad, Pakistan.
- 17. Attended, Science Tour 2014: Living in a Digital World Artificial Intelligence and Visual/Multimodal Computing, January 19<sup>th</sup> 25<sup>th</sup>, 2014 by the German Academic Exchange Service (DAAD) at South of Germany.
- 18. Attended, Business Analytics Summit, Punjab Information Technology Board, January 29th, 2014, Arfa Software Technology Park, Lahore, Punjab.
- 19. Attended, 2nd Computational Science Conference, October 20<sup>th</sup> 25<sup>th</sup>, 2013 at International Islamic University, Islamabad, Pakistan.
- 20. Attended, International workshop on Visualization in Science and Technology Education, ARTEMIS Visualization Group Massachusetts Institute of Technology, September 14<sup>th</sup> 18<sup>th</sup>, 2013 at Virtual University, Lahore, Pakistan.
- 21. Attended, Cloud Computing Summit, Punjab Information Technology Board, April 16th, 2013, Arfa Software Technology Park, Lahore, Punjab.
- 22. Attended, International Conference on Science Policies and Restructuring of National Systems of Innovation, October 3<sup>rd</sup> 5<sup>th</sup>, 2012 at COMSTECH, Islamabad, Pakistan.
- 23. Attended, International Workshop on Computational Methods in Mathematics, May 7th 9th, 2012 at COMSTECH, Islamabad, Pakistan.
- 24. Attended, "MAO Multi-Agent Organization", December19<sup>th</sup> 23<sup>rd</sup>, 2011 at the Lorentz Center, Leiden, The Netherlands.
- 25. Attended, Masterclass on "Human-Computer Interaction", November 24th, 2011 at VU University Amsterdam, Amsterdam, The Netherlands.
- 26. Attended, Advanced SIKS-Course on Computational Intelligence, October13<sup>th</sup> 14<sup>th</sup>, 2011 at the Conference Center Hotel Mitland, Utrecht, The Netherlands.
- 27. Attended, International Workshop on Errors in the Science, September 24th— 28th, 2011 at the Lorentz Center, Leiden, The Netherlands.

- 28. Attended, Creativity: Meaning, Mechanisms, Models, September 12<sup>th</sup> 16<sup>th</sup>, 2011 at the Lorentz Center, Leiden, The Netherlands.
- 29. Attended, Summer School on Data Mining, August 29<sup>th</sup> September 1<sup>st</sup>, 2011 at Department of Knowledge Engineering, Maastricht University, Maastricht, The Netherlands.
- 30. Attended, International Summer School on Intelligent Agent Technology and Web Intelligence, August 26th 27th, 2011, Campus de la Doua, Lyon, France.
- 31. Attended, the School for Information and Knowledge Systems (SIKS) on "Learning and Reasoning", June 9th 10th, 2011 at the Landgoed Huize Bergen, Vught, The Netherlands.
- 32. Attended, the School for Information and Knowledge Systems (SIKS) on "Information Retrieval", June 7<sup>th</sup> 8<sup>th</sup>, 2011 at the Landgoed Huize Bergen, Vught, The Netherlands.
- 33. Attended, High Performance Computing: Useful for scientific research? June 1st, 2011 at VU Universiteit, Amsterdam, The Netherlands.
- 34. Attended, the School for Information and Knowledge Systems (SIKS), "advanced course on Agent Based Simulation", February 21<sup>st</sup> 22<sup>nd</sup>, 2011 at the Conference Center Woudschoten, Zeist, The Netherlands.
- 35. Attended, 3<sup>rd</sup> International Workshop, "HART Human-Agent-Robot Teamwork", December 13<sup>th</sup> 17<sup>th</sup>, 2010 at the Lorentz Center, Leiden, The Netherlands.
- 36. Attended, Scientific ICT Research Event Netherlands (Next Level) SIREN/NL 2010, November 2<sup>nd</sup>, 2010 at Veldhoven, The Netherlands.
- 37. Attended, Masterclass on "Design Science methodology: Principles and Practice", October 15th, 2010 at Conference Center Hoog Brabant, Utrecht, The Netherlands.
- 38. Attended, International Workshop "Computational Intelligence in HealthCare", September 21<sup>st</sup> 22<sup>nd</sup>, 2010 at TU/e, Eindhoven, The Netherlands.
- 39. Attended, Summer School, "Computational Intelligence in HealthCare", September 20th 24th, 2010 at TU/e, Eindhoven, The Netherlands.
- 40. Attended, 4th International Workshop on Human Aspects in Ambient Intelligence: Agent Technology, Human-Oriented Knowledge, and Applications (IAT: HAI), August 31st, 2010, York University, Toronto, Canada.
- 41. Attended, 2<sup>nd</sup> International Workshop on Collaborative Agents -- REsearch and Development (CARE), August 31<sup>st</sup>, 2010, York University, Toronto, Canada.
- 42. Attended, The Joint International Workshop on Trust in Location and Communications in Decentralised Computing, June 15th, 2010, at Iwate Prefecture Citizen's Cultural Exchange Conference Center (AIINA), Morioka, Iwate, Japan.
- 43. Attended, Tutorial on "Identity Management", June 14th, 2010, at Iwate Prefecture Citizen's Cultural Exchange Conference Center (AIINA), Morioka, Iwate, Japan.
- 44. Attended, International Workshop "Understanding and the Aims of Science", May 31st June 4th, 2010 at the Lorentz Center, Leiden, The Netherlands.
- 45. Attended, International Workshop "Integrating Cultures: Models, Simulations and Applications", April 6th 9th, 2010 at the Lorentz Center, Leiden, The Netherlands.
- 46. Attended, International Workshop "Formal Theories of Communication", February 22<sup>nd</sup> 26<sup>th</sup>, 2010 at the Lorentz Center, Leiden, The Netherlands.
- 47. Attended, International Workshop "Philosophy of the Information and Computing Sciences", February 8<sup>th</sup> 12<sup>th</sup>, 2010 at the Lorentz Center, Leiden, The Netherlands.

- 48. Attended, Joint Workshop on Agent Technology for Disaster Management & Intelligent Agents in Sensor Networks and Sensor Web, December 12th, 2009, Nagoya Institute of Technology, Nagoya, Japan.
- 49. Attended, Tutorial on Game-theory/Mechanism Design/Auctions in Multi-agent Systems, December 13th, 2009, Nagoya Institute of Technology, Nagoya, Japan.
- 50. Attended, Tutorial on Computational Approaches in Social Computing, December 3<sup>rd</sup>, 2009 at Windsor Suites Hotel Bangkok, Bangkok, Thailand.
- 51. Attended, Workshop on Social Computing in Education, August 31st, 2009 at Vancouver, Canada.
- 52. Attended, Tutorial on Cognitive Modeling with the Neural Engineering Framework, July 23<sup>rd</sup>, 2009 at University of Manchester, Manchester, United Kingdom.
- 53. Attended, International Workshop "Brain Waves", June 22<sup>nd</sup> 26<sup>th</sup>, 2009 at the Lorentz Center, Leiden, The Netherlands.
- 54. Attended, Workshop on "EndNote 2007", March 10th, 2009 at Main Library VU Universiteit, Amsterdam, The Netherlands.
- 55. Attended, Modeling and Simulating Work Practice with the Brahms Agent Environment, May 2008, at Utrecht University, Utrecht, The Netherlands.
- 56. Attended, Workshop on "Agent Based Approaches in Economics", January 2008, at Erasmus School of Economics, Rotterdam, The Netherlands.
- 57. Attended, Almende Summer School on Self Organizing Systems and Agent Architecture, August 2007, Rotterdam, The Netherlands.
- 58. Attended, 4th International Workshop on Frontiers of Information Technology (FIT'06), December 20th 21st, 2006, Islamabad, Pakistan.
- 59. Attended, Microsoft TechNet and MSDN Workshop in February 2005 held at Pearl Continental Hotel, Lahore, Pakistan.
- 60. Attended, Computer Science Teacher Training Workshop, CSTTW'04, in August 2004 held at Punjab University College of Information Technology, Lahore, Pakistan.
- 61. Attended, Workshop on Knowledge Management in January 2004 held at Punjab University College of Information Technology, Lahore, Pakistan.
- 62. Participated, Summer School in Morphology and Syntax of Urdu for Computational Linguistics during August 13<sup>th</sup> 23<sup>rd</sup>, 2003 held at National University of Computer and Emerging Sciences, Lahore, Pakistan.
- 63. Attended, Workshop on Software Development in Urdu and Regional Languages in September 2002 held at Karachi Institute of Information Technology, Karachi, Pakistan.

### MEMBERSHIP OF LEARNED SOCIETIES

- 1. Member of Association of Computing Machinery (ACM) (www.acm.org)
- 2. Member of Institute of Electrical and Electronics Engineering (IEEE) (www.ieee.org)
- 3. Member of IEEE Computer Society (IEEE-CS) (www.computer.org)
- 4. Member Computer Science Teachers Association (CSTA) (csta.acm.org)
- 5. Member of International Network for Social Network Analysis (INSNA) (www.insna.org)