Saqib Ali

Curriculum Vitae

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Precision Agriculture Lab, CAS,
University of Agriculture, Faisalabad - Pakistan
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DOB: June 07, 1977

Work Experience

Oct 2024 – to-date **Professor**, *In-charge Precision Agriculture Lab, CAS / Department of Computer Science, Faculty of Science, University of Agriculture, Faisalabad, Pakistan*

Jan 2024 – Oct 2024 **Associate Professor**, *In-charge Precision Agriculture Lab, CAS / Department of Computer Science, Faculty of Science, University of Agriculture, Faisalabad, Pakistan*

2015 – 2024 **Assistant Professor**, *In-charge Precision Agriculture Lab, CAS / Department of Computer Science, Faculty of Science, University of Agriculture, Faisalabad, Pakistan*

2014–2015 **Research Fellowship**, *Department of Computer Science, Faculty of Computing, Universiti Teknologi Malaysia, Malaysia*

2006–2010 **Lecturer**, *Department of Computer Science, Faculty of Science, University of Agriculture, Faisalabad, Pakistan*

2004–2005 **Network Assistant**, *Department of Computer Science, Faculty of Science, University of Agriculture, Faisalabad, Pakistan*

Products Startups

Kisan360 APP, *Crop Monitoring APP available on Apple Store & Google Play Store*

CitrusCounter APP, *Citrus Yield Monitoring APP available on Google Play Store*

CropMet APP, *Weather Monitoring APP available on Google Play Store*

Responsibilities - In-charge Precision Agriculture Lab

HPC Cluster, *Dual A100 GPUs and InfiniBand for AI, Bioinformatics, and BigData Workloads*

Vision Cluster, *Dual NVIDIA RTX A6000 with NVLink Bridge for Powerful Visual Computing and Big Data Analytics*

Drone Imagining, *eBeeX SenseFly/DJI with Multispectral, RGB, and Thermal Sensors*

Weather Network, *Localized Weather Stations for Continuous Monitoring Utilizing Big Data Analytics*

Kitchen Gardening Robot, *Utilizing big data analytics, computer vision, and IoT to optimize plant care*

Eddy Flux Tower, *Leveraging big data analytics for precise monitoring of ecosystem carbon, water, and energy exchanges*

Handheld Sensors and IoTs, *Water, Soil, Quantum, Sunlight Sensors, 3D wind Sensors*

Education

2017–2019 **Postdoctoral Fellowship**, *School of Computer Science and Cyber Engineering, Guangzhou University, Guangzhou, China*

2010–2014 **PhD Computer Science**, *Faculty of Computing, Universiti Teknologi Malaysia*

2003–2005 **MS Computer Science**, *Department of Computer Science, Faculty of Science, University of Agriculture, Faisalabad, Pakistan*

2001–2003 **M.Sc. Computer Science**, *Department of Computer Science, Faculty of Science, University of Agriculture, Faisalabad, Pakistan*

1996–2000 **B.Sc. Agricultural Engineering (Bronze Medal)**, *University of Agriculture, Faisalabad, Pakistan*

PhD Computer Science Supervision

2019–2024 **Ms. Shazia Riaz**, **Thesis Title:** Limiting Privacy Breaches in Deep Learning Models Using Differential Privacy - **Graduated**

2019–2025 **Muhammad Shakeel Faridi**, **Thesis Title:** A Trustworthy Blockchain Assisted Interoperability Framework for Textile 4.0 - **Waiting for viva**

2019–2025 **Mr. Akmal Rehan**, **Thesis Title:** Authenticity and Traceability Analysis using IoT and Blockchain for Smart Agriculture - **Waiting for viva**

2020–Ongoing **Mr. Sohaib Yousaf**, **Thesis Title:** Adversarial Attacks against Multi-sensor Perception System in Autonomous Vehicles - **Thesis submission is in progress**

2021–Ongoing **Ms. Anam Khalid**, **Thesis Title:** Deep Learning-Based Crop Identification using Remote Sensing Data - **Thesis submission is in progress**

2020–Ongoing **Ms. Omal Sahar**, **Thesis Title:** Improving Segmentation of Overlapping Leaves for Plant Phenotyping - **Thesis submission is in progress**

MS/BS Computer Science Supervision

2005–2025 **MS Computer Science Enrolled:** 9

2005–2025 **MS Computer Science Graduated:** 76

2005–2025 **M.Sc. Computer Science Graduated:** 56

2005–2025 **Final Year Projects Graduated:** 85

International Research Collaborations

2024 – Ongoing **Pakistan-China Joint Lab for Artificial Intelligence and Smart Agriculture**, *Satellite Image Processing*, Pakistan. `https://www.dawn.com/news/1832207`

2023 – 2025 **Software Development**, *Satellite Image Processing and AI*, **Guangdong CAS Cogniser Information Technology Co. Ltd.**, P.R. China. `https://www.cogniser.cn/`

2013 – 2020 **Researcher (worked remotely)**, *PingER: Worldwide Internet Performance & Analysis*, **SLAC National Laboratory, Stanford University**, California, USA, **Team Leader**: Prof. Dr. Roger Leslie Anderton Cottrell `http://www.slac.stanford.edu/~cottrell/`

June 2010 – 2010 **Researcher Associate**, *Title: Multi-Core Embedded System Architectures, Design and Programming Methodologies for Multi-View Coding (MVC)*, **University of Karlsruhe**, Germany `https://www.kit.edu/`

August 2005 – 2005 **Researcher Associate**, *Title: Security Issues in Wireless Ad hoc Networks*, **Norwegian University of Science and Technology – NTNU Trondheim**, Norway `https://www.ntnu.edu/`

Research Grants & Projects

2023-2025 **iCARE Pilot Innovations, ADPC, World Bank**, PI - High Throughput Crop Monitoring using Computer Vision for Climate Smart Agriculture, **Asian Disaster Preparedness Center - World Bank**, (**Granted - USD 100000**)

2024- 2026 **Endowment Fund, UAF**, PI - Development of Intelligent Drone Sprayer Formulation Mobile APP, **Grant No. TT144/24**, (**Granted - 2.394 Million PKR**)

2023-2025 **National Research Program for Universities**, PI - AgroChain - A Wheat and Sugar Traceability Solution using IoT and Blockchain, **Grant No.: NRPU-15516, HEC Pakistan**, (**Granted - Rs. 7.12 Million PKR**)

2022-2024 **Annual Development Program, Punjab**, *Piloting Precision Agriculture Technologies in the Selected Agro-Ecological Zones of Punjab*, CO-PI - Precision Agriculture, University of Agriculture, Faisalabad, **ADP-2022, Agriculture Department, Government of Punjab**, (**Granted - 295.82 Million PKR**)

2020-2022 **National Centre of Robotics and Automation (NCRA), NUST Rawalpindi**, PI - Sustainable Agricultural Production System in Urban Areas by Using CNC Kitchen Gardening Robot, **Grant: NCRA, NUST - Rawalpindi**, (**Granted - 13.02 Million PKR**)

2020-2024 **Higher Education Commission**, *Establishment of National Center in Big Data & Cloud Computing (NCBC)*, CO-PI - Precision Agriculture and Analytics Lab, University of Agriculture, Faisalabad, **Grant: Higher Education Commission**, (**Granted - 111.2 Million PKR**)

2019-2021 **Endowment Fund, UAF**, PI - AgroChain - An Intelligent System to Track Down Counterfeit Agricultural Inputs using IoT & Blockchain Technology, **Grant No. TT132/20**, (**Granted - 1.335 Million PKR**)

2021-2026 **Korea International Cooperation Agency (KOICA)**, CO-PI - Establishment of Pak-Korea Nutrition Center (PKNC) to Improve Child and Community Nutrition, **KOICA & HEC, Islamabad**, (**Grant - 1483.350 Million PKR**)

2018 – 2019 **Guangdong Province Grant No. 2016010**, PI - An end-to-end Internet performance monitoring framework for CERNET using big data and machine learning techniques, 基于大数据和机器学习的中国教育网端到端性能监测框架, **广东省博士后科研启动项目**, China

2017 – 2018 **CERNET Innovation Project under Grant No. NGII20170102**, CO-PI - PingERv6: An end-to-end Internet performance monitoring framework for IPv6 networks, 基于IPv6的教育科研网端到端性能监测平台, **CENET**, China

2013 – 2014 **PRGS/1/2014/ICT03/UTM/02/1**, *Development of Embedded Interference Aware Wireless Mesh Router in High Speed Network*, **Ministry of Higher Education**, Malaysia

2014 – 2015 **FRGS/1/2014/ICT03/UTM/02/1**, *A Fundamental Study of Hybrid Unsupervised Machine Learning Model for Anomaly Intrusion Detection System*, **Ministry of Higher Education**, Malaysia

2014 – 2015 **FRGS 2014-2**, *A study of Anomalies in High Speed Networks Using Near Real Time Internet Performance Monitoring*, **Ministry of Higher Education & MYREN**, Malaysia

Training & Workshops

2022 **Virtual Training of Trainers on Capacity Building of Academic Leadership in Advance Research, Teaching Methodologies, and Services Provision**, United States Educational Foundation in Pakistan, Pakistan

2022 **Nutrition and Public Health for Developing Economics Strategies and Sustainable Solutions**, PKNC, UAF, Faisalabad

2022 **Capacity building of stakeholders to develop site specific climate adaptations in Agriculture**, D8 Cooperation Fund, Pakistan

2022 **An International Symposium on Data Science for Agriculture and Food Security**, UAF, Faisalabad

2022 **Crop Estimation, Forecasting and Reporting Based on the Integral Use of Remotely Sensed Data**, UAF, Faisalabad

2020 **Course CS100: Cyber Security for Lab Users**, IT Network Engineering, SLAC Stanford, USA

2019 **Project Monitoring & Evaluation System (PMES) Software for PSDP Funded Projects**, Pakistan Planning and Management Institute (PPMI) Islamabad, Ministry of Planning, Development and Reforms, Planning Commission, Government of Pakistan

2019 **Course CS100: Cyber Security for Lab Users**, IT Network Engineering, SLAC Stanford, USA

2018 **Course CS100: Cyber Security for Lab Users**, IT Network Engineering, SLAC Stanford, USA

2017 **User Cyber CS-100 Security Training**, IT Network Engineering, SLAC Stanford, USA

2016 **National ICT R&D workshop on "Communication Science & Systems" which is the 7th in the series of "Teaching the Teachers workshop"**, Lahore University of Management Sciences (LUMS) Lahore, Pakistan

2015 **National ICT R&D workshop on "Communication Science & Systems" which is the 6th in the series of "Teaching the Teachers workshop"**, Lahore University of Management Sciences (LUMS) Lahore, Pakistan

2015 **Workshop on INTERNET GOVERNANCE with ICANN, APNIC, & ISOC**, HEC Islamabad, Pakistan

2015 **Workshop on Artificial Intelligent & Robotics in Precision Agriculture and Forestry (AIRAGFO)**, Lahore University of Management Sciences (LUMS) Lahore, Pakistan

2016 **Provided Indigenous on Campus Training (IoT) Under Modern University Governance Program: Part 2**, University of Agriculture, Faisalabad, Pakistan

2015 **Provided Indigenous on Campus Training (IoT) Under Modern University Governance Program: Part 1**, University of Agriculture, Faisalabad, Pakistan

2014 **Poster Evaluator - Postgraduate Annual Research Seminar PCRG-PARS'14**, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia, Malaysia

2012 **Certificate of Participation - The 1^{st} UTM-MIMOS Symposium on Advanced Telecommunication Technology (USATT-2012)**, Faculty of Electrical Engineering, Universiti Teknologi Malaysia, Malaysia

2012 **Certificate of Attendance – Mendeley Training Workshop**, Center of Engineering Education (CEE), Universiti Teknologi Malaysia, Malaysia

2012 **Certificate of Appreciation - Postgraduate Annual Research Seminar PCRG-PARS'12**, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia, Malaysia

2012 **Indexed Journal Publication Workshop**, Research Publication Center, Universiti Teknologi Malaysia, Malaysia

2011 **Program Committee Member - Postgraduate Annual Research Seminar PCRG-PARS'11 & 12**, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia, Malaysia

2011 **Certificate of Participation - Postgraduate Annual Research Seminar PCRG-PARS'11 & 12**, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia, Malaysia

2011 **Certified Training for Computer Animation Techniques**, Universiti Teknologi Malaysia, Malaysia

2010 **Computer Animation Techniques: Motion Data Management**, Department of Computer Graphics and Multimedia, Faculty of Computer Science and Information Systems, Universiti Teknologi Malaysia, Malaysia

2009 **French Intensive Language L1–L2**, French Language Center, Pakistan

2007 **Linux Administration Training Tool Kit**, Pakistan Software Export Board, Ministry of Information Technology, Pakistan

2007 **RDBMS: My SQL Training**, Pakistan Software Export Board, Ministry of Information Technology, Pakistan

2007 **Programming with PHP Training**, Pakistan Software Export Board, Ministry of Information Technology, Pakistan

Administrative Responsibilities

2022 – 2025 **Member Technical - HPC Procurement Committee**, *Procurement of High-performance Computing, University of Agriculture, Faisalabad, Pakistan.*

2019 – 2025 **Convener Tender Committee**, *Procurement of ICT equipment, University of Agriculture, Faisalabad, Pakistan.*

2019 – 2025 **Focal Person**, *Ignite - National Technology Fund, Pakistan.*

2019 – 2025 **Advisor to MS Computer Science & Software Engineering** , *Department of Computer Science, University of Agriculture - Faisalabad, Pakistan.*

2019 – 2020 **External Examiner**, *Department of Computer Sciences, COMSATS University Islamabad - Vehari Campus, Pakistan*

2015 – 2017 **Member Department Board of Studies**, *Department of Computer Science, University of Agriculture - Faisalabad, Pakistan.*

2015 – 2017 **Member Department Thesis Evaluation Committee - Department of Computer Science**, *Department of Computer Science, University of Agriculture - Faisalabad, Pakistan.*

2015 – 2017 **Advisor to MS Computer Science**, *Department of Computer Science, University of Agriculture - Faisalabad, Pakistan.*

2015 – 2017 **In-charge Time Table & Examination Committee - Department of Computer Science**, *Department of Computer Science, University of Agriculture - Faisalabad, Pakistan.*

Intellectual Property

IP: UTM.J.14 JLD68(8) **Malaysia**, **Title:** *Interference Aware Joint Channel Assignment Model in Wireless Mesh Network*, (2014)

IP: UTM.J.14 JLD68(2) **Malaysia**, **Title:** *Interference Aware Non-Overlapping Channel Assignment Model in Wireless Mesh Network*, (2014)

IP: UTM.J.14 JLD68(1) **Malaysia**, **Title:** *Interference Aware Cluster Based Joint Channel Assignment Scheme in Wireless Mesh Network*, (2014)

Courses Taught

- Artificial Intelligence
- Advanced Neural Networks
- Satellite Image Processing
- Big Data Analytics
- Data Communication & Networks
- Blockchain Ecosystem
- Programming Languages
- Machine Learning
- Generative AI
- Drone Image Processing
- Drone Pilot training
- Internet of Things
- Modeling & Simulation
- Research Methods

Skills & Abilities

Programming Languages	C++, GO, MATLAB, Python, Java, Java Script
LLMs	LLAMA, DeepSeek
Blockchain	Hyperledger Fabric, Composer, Caliper, Explorer
Tools	QualNet, NS-3, Node.js

Languages

English	Studied in an English-medium system throughout my education
French	L1 & L2
Chinese	Basic

Journal Publications - Impact Factor

[17] **Khan, S. N., Anjum, L., Arshad, A., Ali, S., Aleem, M., & Nasir, A. (2025).**, *Nature-Based Solution for Wastewater Treatment and Reuse Using Phytoremediation with Floating Plants. Water, 17(7), 1080. https://doi.org/10.3390/w17071080*

[16] **Younas, N., Riaz, S., Ali, S., Khan, R., Ali, F., & Kwak, D. (2025).**, *Detecting malicious code variants using CNN with transfer learning. PeerJ Computer Science, 11, e2727. https://doi.org/10.7717/peerj-cs.2727*

[15] **Fatima, N., Riaz, S., Ali, S., Khan, R., Ullah, M., & Kwak, D. (2024).**, *Sensors Faults Classification and Faulty Signals Reconstruction using Deep Learning. IEEE Access. 2024. https://doi.org/10.1109/ACCESS.2024.3425408*

[14] **Chen, P., Yawar, W., Farooqui, A. R., Ali, S., Lathiya, N., Ghous, Z., ... & Hameed, Y. (2024).**, *Transcriptomics data integration and analysis to uncover hallmark genes in hypertrophic cardiomyopathy. American Journal of Translational Research, 16(2), 637. https://doi.org/10.62347/AXOY3338*

[13] **Riaz, S., Ali, S., Wang, G., Latif, M. A., & Iqbal, M. Z. (2023).**, *Membership inference attack on differentially private block coordinate descent. PeerJ Computer Science, 2023. https://doi.org/10.7717/peerj-cs.1616*

[12] **Ali, S., Ashraf, S., Sohaib Yousaf, M., Riaz, S., & Wang, G. (2023).**, *Automated Segmentation to Make Hidden Trigger Backdoor Attacks Robust against Deep Neural Networks. Appl. Sci, 2023, 4599. https://doi.org/10.3390/app13074599*

[11] **Ali, S., Riaz, S., Safoora, Liu, X., & Wang, G. (2023).**, *A Levenberg–Marquardt Based Neural Network for Short-Term Load Forecasting. Computers, Materials & Continua, 75(1), 1783–1800. https://doi.org/10.32604/cmc.2023.035736*

[10] **Hussain, K., Ilyas, A., Ali, S., Bibi, I., Shakil, Q., Farid, M. U., Saqib, Z. A., Habib, A., & HAKKI, E. E. (2022).**, *Impacts of Nitrogen Fertilizer Application and Mulching on the Morpho-Physiological and Yield-Related Traits in Cotton. Agriculture, 13(1), 12. https://doi.org/10.3390/agriculture13010012*

[9] **Ramzan, M., Saqib, Z. A., Hussain, E., Khan, J. A., Nazir, A., Dasti, M. Y. S., Ali, S., & Niazi, N. K. (2022).**, *Remote Sensing-Based Prediction of Temporal Changes in Land Surface Temperature and Land Use-Land Cover (LULC) in Urban Environments. Land, 11(9). https://doi.org/10.3390/land11091610*

[8] **Ali, S., Wang, G., Riaz, S., & Rafique, T. (2022).**, *Preserving the Privacy of Dependent Tuples Using Enhanced Differential Privacy. Human-Centric Computing and Information Sciences, 12, 43. https://doi.org/10.22967/HCIS.2022.12.043*

[7] **Rehman, A., Abdullah, S., Fatima, M., Iqbal, M. W., Almarhabi, K. A., Ashraf, M. U., & Ali, S. (2022).**, *Ensuring Security and Energy Efficiency of Wireless Sensor Network by Using Blockchain. Applied Sciences, 12(21), 10794. https://doi.org/10.3390/app122110794*

[6] **Riaz, S., Ali, S., Wang, G., & Anees, A. (2022).**, *Differentially private block coordinate descent. Journal of King Saud University - Computer and Information Sciences. https://doi.org/10.1016/j.jksuci.2022.11.017*

[5] **Ali, S., Wang, G., & Riaz, S. (2020)**, *Aspect Based Sentiment Analysis of Ridesharing Platform Reviews for Kansei Engineering. IEEE Access, 4, 1–1. https://doi.org/10.1109/ACCESS.2020.3025823*

[4] **Ali, S., & Ngadi, M. A. (2016)**, *Optimized interference aware joint channel assignment model for wireless mesh network. Telecommunication Systems, 62(1), 215–230*

[3] **Khokhar, R. H., Ngadi, M. A., Latiff, M. S., Ghafoor, K. Z., & Ali, S. (2014)**, *Multi-criteria Receiver Self-Election Scheme for Optimal Packet Forwarding in Vehicular Ad hoc Networks. International Journal of Computers Communications & Control, 7(5), 865*

[2] **Ali, S., Naveed, A., Ngadi, M. A. Bin, & Chaudhry, J. A. (2014)**, *Interference nomenclature in wireless mesh networks. Wireless Personal Communications, 75(4), 1983–2003*

[1] **Bin Ngadi, M. A., Ali, S., Abdullah, A. H., & Khokhar, R. H. (2012)**, *A taxonomy of cross layer routing metrics for wireless mesh networks. EURASIP Journal on Wireless Communications and Networking, 2012(1), 177*

Journal Publications - HEC Recognized

[6] **Ali, H., Mushtaq, M., Haq, N. ul, Ullah, M. A., Ali, S., & Shah, A. (2021)**, *Surgical management and Outcomes of Depressed Skull Fractures. Pakistan Journal of Medical and Health Sciences, 15(7), 2327–2329*

[5] **Nasreen, S., Malik, T., Memon, H. S., Izhar, M., Shah, S. M. S., & Ali, S. (2021)**, *Frequency of Different Pattern of Hair Loss in Pakistani Men Using BASP Classification. Pakistan Journal of Medical and Health Sciences, 15(5), 1187–1189*

[4] **Zeb, S., Almani, K., Arshad, I., Keerio, S. H., & Ali, S. (2021)**, *Prevalence, Mechanism, and Implications of Gastrointestinal Symptoms in COVID-19, Pakistan Journal of Medical and Health Sciences, 15(8), 2206–2209*

[3] **Mushtaq, M., Ali, H., Haq, N. U., Anwar Ullah, M., Shah, A., & Ali, S. (2021)**, *Compare the Outcome of Endoscopic Endonasal versus Transcranial Approach for Cerebrospinal Fluid Leak Repair, Pakistan. Pakistan Journal of Medical and Health Sciences, 15(8), 2224–2227*

[2] **Waseem, S., Rizwan, A. S., Uddin, N. F., Zaman, Q., Sayed, T. M., & Ali, S. (2021)**, *Assessment of knowledge about Essential Obstetric Care among Pregnant Females of Punjab, Pakistan. Pakistan Journal of Medical and Health Sciences, 15(7), 2278–2281*

[1] **Faridi, M. S., Ali, S., Afsar, S., & Javed, Z. (2021)**, *Key Benefits of Cloud-Based Internet of Vehicle (IoV)-Enabled Fleet Weight Management System. International Journal of Advanced Trends in Computer Science and Engineering, 10(3), 1991–1995*

Journal Publications - Others

[9] **Faridi, M. S., Zia, M. A., Javed, Z., Mumtaz, I., & Ali, S. (2021)**, *A Comparative Analysis Using Different Machine Learning: An Efficient Approach for Measuring Accuracy of Face Recognition. International Journal of Machine Learning and Computing, 11(2), 115–120*

[8] **Fatima, F., Ali, S., & Usman Ashraf, M. (2017)**, *Risk Reduction Activities Identification in Software Component Integration for Component Based Software Development (CBSD). International Journal of Modern Education and Computer Science, 9(4), 19–31*

[7] **Faheem, M., Ngadi, A. Bin, Ali, S., Shahid, M. A., & Sakar, L. (2013)**, *Energy based Efficiency Evaluation of Cluster-Based Routing Protocols for Wireless Sensor Networks (WSNs). International Journal of Software Engineering and Its Applications, 7(6), 249–264*

[6] **Ajmal, S., & Ali, S. (2016)**, *Agile-Waterfall Hybrid Model for Software Development Processes. Science International, 28(6), 5165–5170*

[5] **Iftikhar, K., Ali, S., & Ngadi, A. (2016)**, *Enhancement of Non Functional Requirements in Agile Software Development. International Journal of Computer Science and Information Security, 14(12), 820–826*

[4] **Shafeeq, A., & Ali, S. (2016)**, *Usability of information systems software in Pakistan in users perspective. Journal of Software Engineering & Intelligent Systems, 1(2), 122–132*

[3] **Umer, A., & Ali, S. (2016)**, *Data Security Issues in Cloud Computing. International Journal of Computer Science and Information Security, 14(10), 1–8*

[2] **Benqdara, S., Asri Ngadi, M. D., Sharif, J. M., & Ali, S. (2014)**, *Ensemble of clustering algorithms for anomaly intrusion detection system. Journal of Theoretical and Applied Information Technology, 70(3), 425–431*

[1] **Chaudhry, J. A., Ali, S., Bin Ngadi, M. A., & Abdullah, A. H. (2011)**, *Autonomic Service Composition Through Context Orientation Approach. Journal of Theoretical and Applied Information Technology, 34(1)*

Abstracts & Conference Publications

[24] **Khalid, A., & Ali, S. (2024).**, *Leveraging Artificial Intelligence and Multi-Indices Analysis for Enhanced Wheat Crop Classification. International Conference Geo Information for Water and Agricultural Resource Management (ICGWARM), 56.*

[23] **Khalid, A., Ali, S., & Ahmad, W. (2024).**, *AI-enhanced crop growth monitoring with SAR backscatter for emerging technologies in Pakistani agriculture. International Conference on Emerging Technologies for Crop Improvement in Pakistan.*

[22] **Safder, S., Ali, S., & Kamran M. A. (2024).**, *Unmanned Aircraft System Imagery for Phenotyping in Wheat, Soybean, and Cotton Breeding. International Conference on Emerging Technologies for Crop Improvement in Pakistan, 30.*

[21] **Sahar,O., & Ali,S. (2023).**, *Advancement of 3D model for segmenting the overlapping leaves in High throughput phenotyping. In The BRI Sino-Pakistan Agriculture Forum, 4th, 140.*

[20] **Khalid, A., & Ali, S. (2023).**, *Crop type identification using multitemporal Sentinel-2 imagery and deep learning models. The 4th BRI Sino-Pakistan Agricultural Forum, 98.*

[19] **Khalid, A., & Ali, S. (2023).**, *Monitoring the impact of climate change on fodder crops using satellite imagery and deep learning model. International Conference on Fodder Production in Climate Shift Paradigm: Better Nutrition for Better Dairy Production, 19–20.*

[18] **Sahar,O., & Ali,S. (2023).**, *High-throughput maize phenotyping using computer vision. Fodder Production in Climate Shift Paradigm: Better Nutrition for Better Dairy Production, 45.*

[17] **Ali, S., Safder, S., & Kamran, M. A. (2023).**, *High throughput soybean phenotyping with UAVs and geospatial analysis. In The BRI Sino-Pakistan Agriculture Forum, 4th, 38.*

[16] **Faridi, M. S., Ali, S., Duan, G., & Wang, G. (2021).**, *Blockchain and IoT Based Textile Manufacturing Traceability System in Industry 4.0. In The 13th International Conference on Security, Privacy and Anonymity in Computation, Communication and Storage, 331–344.*

[15] **Yousaf, M. S., Riaz, S., Ali, S., Chen, S., & Wang, G. (2021).**, *The Future Prospects of Adversarial Nets. In The 13th International Conference on Security, Privacy and Anonymity in Computation, Communication and Storage, 15–26.*

[14] **Tariq, A., Ali, S., Xing, X., & Wang, G. (2020).**, *Intelligent Surveillance in Smart City Using 3D Road Monitoring. 2020 IEEE 8th International Conference on Smart City and Informatization (ISCI), 31–36.*

[13] **Younas, A., Nasim, R., Ali, S., Wang, G., & Qi, F. (2020).**, *Sentiment Analysis of Code-Mixed Roman Urdu-English Social Media Text using Deep Learning Approaches. 2020 IEEE 23rd International Conference on Computational Science and Engineering (CSE), 23(3), 66–71.*

[12] **Ali, S., Wang, G., Fatima, K., & Liu, P. (2019).**, *Semantic Knowledge Based Graph Model in Smart Cities. Smart City and Informatization. (iSCI 2019), 1, 268–278.*

[11] **Ali, S., Wang, G., White, B., & Fatima, K. (2019).**, *Libra Critique Towards Global Decentralized Financial System. In G. Wang, A. El Saddik, X. Lai, G. Martinez Perez, & K.-K. R. Choo (Eds.), Smart City and Informatization. (iSCI 2019), 661–672.*

[10] **Ali, S., Wang, G., & Bhuiyan, M. Z. (2018)**, *Secure Data Provenance in Cloud-centric Internet of Things via Blockchain Smart Contracts. In 2018 15th IEEE International Conference on Ubiquitous Intelligence and Computing, (UIC 2018)*

[9] **Li, X., Wang, G., Ali, S., & He, Q. (2018)**, *Android Malware Detection Using Category-based Permission Vectors. In 2018 18th International Conference on Algorithms and Architectures for Parallel Processing, (ICA3PP 2018)*

[8] **Zhang, W., Xing, X., Ali, S., & Wang, G. (2018)**, *Internet Performance Prediction Framework Based on PingER Dataset. In 2018 18th International Conference on Algorithms and Architectures for Parallel Processing, (ICA3PP 2018), In press*

[7] **Ali, S., Wang, G., & Cottrell, R. L. (2018)**, *A Blockchain-based Decentralized Data Storage and Access Framework for PingER. 2018 17th IEEE International Conference on Trust, Security and Privacy in Computing and Communications, 12th IEEE International Conference on Big Data Science and Engineering (TrustCom/BigDataSE), 1303–1308.*

[6] **Ali, S., Wang, G., Xing, X., & Cottrell, R. L. (2018)**, *Substituting Missing Values in End-to-end Internet Performance Measurements using k-Nearest Neighbors. In 2018 IEEE 16th Intl Conf on Dependable, Autonomic and Secure Computing, 4th Intl Conf on Big Data Intelligence and Computing and 3rd Cyber Science and Technology Congress (DASC/DataCom/CyberSciTech) (p. In press)*

[5] **Ali, S., Wang, G., Cottrell, R. L., & Anwar, T. (2017)**, *Detecting Anomalies from End-to-End Internet Performance Measurements (PingER) Using Cluster Based Local Outlier Factor. In 2017 IEEE International Symposium on Parallel and Distributed Processing with Applications and 2017 IEEE International Conference on Ubiquitous Computing and Communications (ISPA/IUCC) (pp. 982–989)*

[4] **Ali, S., Wang, G., Cottrell, R. L., & Masood, S. (2017)**, *Internet Performance Analysis of South Asian Countries Using End-to-End Internet Performance Measurements. In 2017 IEEE International Symposium on Parallel and Distributed Processing with Applications and 2017 IEEE International Conference on Ubiquitous Computing and Communications (ISPA/IUCC) (pp. 1319–1326)*

[3] **Hameed, A., Ali, S., Cottrell, R. Les, & White, B. (2016)**, *Applying big data warehousing and visualization techniques on PingER data. In Proceedings of the 3rd IEEE/ACM International Conference on Big Data Computing, Applications and Technologies - BDCAT '16 (pp. 67–72)*

[2] **Ali, S., Leslie, R., Cottrell, A., & Naveed, A. (2015)**, *PingER Malaysia-Internet Performance Measuring Project: A Case Study. In NETAPPS 2015 (pp. 1–6)*

[1] **Kamal, K. A., Chaudhry, J. A., Ali, S., Ahmad, M., Ngadi, M. A. Bin, & Abdullah, A. H. (2011)**, *A synopsis of self-healing functions in wireless networks. In 2011 IEEE 14th International Multitopic Conference (pp. 176–181)*

References

Prof. TS. Dr. Md Asri Bin Ngadi
Department of Computer Science, Faculty of Computing
Universiti Teknologi Malaysia
Malaysia, 81310
dr.asri@utm.my
https://comp.utm.my/asri/

Prof. Dr. Wu Jun
Guangzhou Software Application Technology Research Institute, Guangdong
Chinese Academy of Sciences(GZISCAS)
wujun@cogniser.cn
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