Dr. Jamal Hussain Shah

Tenured Associate Professor | Computer Science
HEC Approved Supervisor

Email: jshah@ciitwah.edu.pk, jamalhussainshah@gmail.com
Phone: +92 321 5279005 | WhatsApp: +92 333 5205028
Google Scholar: https://scholar.google.com/citations?user=96XFWaUAAAAJ&hl=en

My career philosophy is: Striving for excellence and staying out of comfort-zone to become a Teacher by Profession, Researcher by Practice, and Innovator by Action.
Key words I speak in the domains of: Computer Vision, Machine Learning, and Deep Learning including medical image processing.

Highlights

Please find below highlights of my achievements in R&D and work for society after completion of my doctoral degree:
I have published articles in a number of high impact factor journals such as Nurocomputing, Future Generation Computer Systems, Pattern Recognition Letters, Pattern Analysis and Applications. Furthermore, I am member of technical program committee for international conferences, and reviewer of numerous high quality journals including future generation computer system, Computational Intelligence and Neuroscience, and International Journal of Advanced Robotic Systems, IEEE Access among many others. I am proud to share that I have received six research/project funding as PI. One research grant is from NRPU-HEC, Pakistan (Rs. 3.4 million) and three National Grassroot ICT Research Initiative (NGIRI) funding where our aim is to develop robotic drone fish using swarms intelligent and process onboard data streams in order to analyze the germs in water like bacteria causing diseases. Being HEC approved supervisor I have successfully supervised more than 50 MS/PhD students during my tenure. I and my student are closely working with healthcare providers, hospitals in investigating high performance analytics systems for medical imaging, clinical intelligence and integration, iterative genome analytics and precision medicine.

Education

2013 - 2016	**PhD (Control Science and Engineering, Department of Automation)** University of Science and Technology of China (USTC), Hefei, China
2009 - 2011	**MS(CS) (Master of Science in Computer Science) (CGPA 3.44/4.00)** COMSATS Institute of Information Technology Wah Cantt, Pakistan
2004 - 2008	**BS(CS) (Bachelor of Science in Computer Science) (CGPA 3.22/4.00)** COMSATS Institute of Information Technology Wah Cantt, Pakistan

Administrated Responsibilities

2023-Today	Member Departmental Academic Review Committee (DARC)
2023-Today	Head Internships Industrial Liaison Committee
2023-Today	Member Graduate Advisory/Supervisory Committee
2021-2024	Graduate Coordinator
2023-Today	Member Domain Head AI

Professional Experience

2023-Todate **Tenured Associate Professor | Computer Science | COMSATS University Islamabad, Wah Campus**

- Teaching Graduate/Undergraduate and Research & Development
- **Administrated Duties**: Domain Head Artificial Intelligence | Graduate Coordinator | Research Supervisor | Member FYP Internal Evaluation Committee | Member Department Review Committee
- **Subjects**: Computer Vision | Pattern Recognition | Programming Languages

2016- 2023 **Assistant Professor | Computer Science | COMSATS University Islamabad, Wah Campus**

- Teaching Graduate/Undergraduate and Research & Development
- **Administrated Duties**: Domain Head Artificial Intelligence | Graduate Coordinator | Research Supervisor | Member FYP Internal Evaluation Committee
- **Subjects**: Image Processing | Computer Vision| Computational Intelligence | Web Technologies

2011-2013 **Lecturer | Computer Science | COMSATS University Islamabad, Wah Campus**

- Teaching Graduate/Undergraduate and Research & Development
- **Subjects**: Visual Programming | Web Technologies | Artificial Intelligence | Cyber Security | Network Security | Programming Languages (HTML, C#, Java, C/C++)

Award and Achievements

2022-2023 Organizational Outstanding Performance Award and Appreciation Letter (COMSATS University, Wah Campus)

2021-2022 Organizational Outstanding Performance Award and Appreciation Letter (COMSATS University, Wah Campus)

2012-2014 Received Research Productivity Award (RPA) 2017-2019 from COMSATS University
2017-2019 Islamabad, Pakistan

Publications

2024 F.A Khokhar, **JH Shah**, Rabia Saleem, Anum Masood, "Harnessing deep learning for faster water quality assessment: identifying bacterial contaminants in real time", The Visual Computer, pp. 1-12, 2024.

2024 Nauman Qadeer, **JH Shah**, M. Sharif, F. Dahan, F.A Khokhar, R. Ghaza, "Multi-camera tracking of mechanically thrown objects for automated in-plant logistics by cognitive robots in Industry 4.0", The Visual Computer, pp. 1-20, 2024.

2023 I Naz, **JH Shah**, M H Rehman, M Rafiq, G S Choi, "Quantum Mechanism-Based Convolution Model for the Classification of Pathogenic Bacteria", IEEE Access, Vol. 11, pp. 137747-137757, 2023

2023 A Batool, MW Nisar, MA Khan, **JH Shah**, U Tariq, R Damaševičius, "Traffic sign recognition using proposed lightweight twig-net with linear discriminant classifier for biometric application", Image and Vision Computing, vol.135 pp. 104711, 2023

2023 A Batool, MW Nisar, **JH Shah**, MA Khan, AA El-Latif, "iELMNet: integrating novel improved extreme learning machine and convolutional neural network model for traffic sign detection", Big data, vol. 11, pp. 323-338, 2023

2023 IM Nasir, M Raza, **JH Shah**, MA Khan "Improved Shark Smell Optimization Algorithm for Human Action Recognition.", Computers, Materials & Continua, Vol. 3, 2023

2023 IM Nasir, M Raza, SM Ulyah, **JH Shah**, N LFM Syafrudin "ENGA: Elastic Net-Based Genetic Algorithm for Human Action Recognition", *Expert Systems with Applications*, 2023.

2023 S Khalid, **JH Shah**, M Sharif, M Rafiq and GS Choi3, "Traffic Sign Detection with Low Complexity for Intelligent Vehicles Based on Hybrid Feature", *Computers, Materials & Continua,* vol. 0 ,pp. 1-19, 2023.

2023 IM Nasir, M Raza, **JH Shah**, MA Khan, YC Nam, "Improved Shark Smell Optimization Algorithm for Human Action Recognition", Computers, Materials & Continua, vol. 0 ,pp. 1-15, 2023.

2023 AM Fayyaz, M Raza, M Sharif, **JH Shah**, S Kadry, S Martínez, "An Integrated Framework for COVID-19 Classification Based on Ensembles of Deep Features and Entropy Coded GLEO Feature Selection" International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems, vol. 31, no. 1, pp. 163-185, 2023.

2022 S Iqbal, F Khan, HU Khan, T Iqbal, JH Shah, "Sentiment Analysis of Social Media Content in Pashto Language using Deep Learning Algorithms", Journal of Internet Technology, vol. 23, no.7, 2022

2022 A Shahzad, M Raza, JH Shah, M Sharif, RS Nayak, "Categorizing white blood cells by utilizing deep features of proposed 4B-AdditionNet-based CNN network with ant colony optimization", Complex & Intelligent Systems, vol. 8, 2022.

2022 MS Amin, JH Shah, M Yasmin, GJ Ansari, MA Khan, U Tariq, YJ Kim, and B Chang, "A Two Stream Fusion Assisted Deep Learning Framework for Stomach Diseases Classification", Computers, Materials & Continua, vol. 73 ,pp. 4423-4439, 2022.

2022 M Ali, JH Shah, MA Khan, M Alhaisoni, U Tariq, T Akram, YJ Kim, B Chang, "Brain Tumor Detection and Classification Using PSO and Convolutional Neural Network", Computers, Materials & Continua, vol. 73 ,pp. 4501-4518, 2022.

2022 Nauman Qadeer, **Jamal Hussain Shah**, Muhammad Sharif, Muhammad Attique Khan, Ghulam Muhammad, Yu-Dong Zhang , "Intelligent Tracking of Mechanically Thrown Objects by Industrial Catching Robot for Automated In-Plant Logistics 4.0", *Sensors*, Vol. 22, P. 2113.

2022 IM Nasir, M Raza, **Jamal Hussain Shah**, SH Wang, U Tariq, MA Khan, "HAREDNet: A deep learning based architecture for autonomous video surveillance by recognizing human actions", *Computers and Electrical Engineering*, Vol.99, P. 107805, 2022.

2022 Fahad Ahmed KhoKhar, Jamal Hussain Shah, Muhammad Attique Khan, Muhammad Sharif, Usman Tariq, Seifedine Kadry, "A review on federated learning towards image processing", Computers and Electrical Engineering, Vol. 99, P. 107818, 2022.

2022 Aisha B., Muhammad Wasif N., **Jamal Hussain Shah**, Muhammad Attique Khan, Ahmed A Abd El-Latif, "iELMNet: Integrating Novel Improved Extreme Learning Machine and Convolutional Neural Network Model for Traffic Sign Detection", Big Data, 2022.

2021 Ghulam Jillani Ansari, **J. H. Shah**, Muhammad Attique Khan, Muhammad Sharif, Usman Tariq, Tallha Akram, "A Non-Blind Deconvolution Semi Pipelined Approach to Understand Text in Blurry Natural Images for Edge Intelligence", *Information Processing and Management,* Vol. 58, P. 102675, 2021. [SCI : IF 3.772]

2021 Rabia Saleem, Jamal Hussain Shah, Muhammad Sharif, Ghulam Jillani Ansari, "Mango Leaf Disease Identification Using Fully Resolution Convolutional Network", *CMC-computers materials and continua*, Vol. 69, pp. 3581-3601, 2021. [SCI : IF 3.772]

2021 Rabia Saleem, **Jamal Hussain Shah**, Muhammad Sharif, Mussarat Yasmin, Hwan-Seung Yong, Jaehyuk Cha, "Mango Leaf Disease Recognition and Classification Using Novel Segmentation and Vein Pattern Technique", *Applied Sciences*, Vol. 11, P. 11901, 2021. [SCI : IF 2.679]

2021 Asim Shahzad, Mudassar Raza, **Jamal Hussain Shah**, Muhammad Sharif, Ramesh Sunder Nayak, "Categorizing white blood cells by utilizing deep features of proposed 4B-

AdditionNet-based CNN network with ant colony optimization", *Complex and Intelligent Systems*, pp.1-17 2021. [SCI : IF 4.927]

2021 Javeria Naz, Muhammad Sharif, Mudassar Raza, Jamal Hussain Shah, Mussarat Yasmin, Seifedine Kadry, S Vimal, "Recognizing Gastrointestinal Malignancies on WCE and CCE Images by an Ensemble of Deep and Handcrafted Features with Entropy and PCA Based Features Optimization", *Neural Processing Letters*, pp. 1-26, 2021. [SCI : IF 2.908]

2021 Muhammad Junaid Umer, Javeria Amin, Muhammad Sharif, Muhammad Almas Anjum, Faisal Azam, **Jamal Hussain Shah**, "An integrated framework for COVID-19 classification based on classical and quantum transfer learning from a chest radiograph", Concurrency and Computation : Practice and Experience, Vol. 1, pp. e6434, 2021., [SCI : IF 1.536]

2021 Shansa Kanwal, **Jamal Hussain Shah**, Muhammad Attique Khan, Seifedine Kadry, Muhammad Sharif, Mussarat Yasmin, M Maheswari, "Person re-identification using adversarial haze attack and defense : a deep learning framework", *Computers and Electrical Engineering,* Vol. 96, Pp. 107542, 2021. [SCI : IF 3.818]

2021 Sheeba Lal, Saeed Ur Rehman, **Jamal Hussain Shah**, Talha Meraj, Hafiz Tayyab Rauf, Robertas Damaševičius, Mazin Abed Mohammed, Karrar Hameed Abdulkareem, "Adversarial Attack and Defence through Adversarial Training and Feature Fusion for Diabetic Retinopathy Recognition", Sensors , Vol. 21, P. 3922, 2021. [SCI : IF 3.576]

2021 G J Ansari, **J.H. Shah**, M CQ Farias, M Sharif, N Qadeer, H Ullah Khan, "An Optimized Feature Selection Technique in Diversified Natural Scene Text for Classification Using Genetic Algorithm", *IEEE Access* , Vol. 9, pp. 54923-54937, [SCI : IF 3.745]

2021 N I Mashood, B Asima, **J.H. Shah**, M A Khan, M Sharif, I Khalid, N Yunyoung, K Seifedine, "Deep LearningBased Classification of Fruit Diseases:An Application for Precision Agriculture", *Computers, Materials and Continua* , Vol. 9, pp. 54923-54937, Vol. 66, pp. 1949-1962, [SCI : IF 4.89]

2021 M Naz, **J.H. Shah**, M A Khan, M Sharif, M Raza, R Damaševičius, "From ECG signals to images : a transformation based approach for deep learning*", PeerJ Computer Science*, Vol. 7, pp. e386, [SCI : IF 3.09]

2021 I M Nasir, M Rashid, **J.H. Shah**, M Sharif, M YH Awan, M H Alkinani, "An Optimized Approach for Breast Cancer Classification for Histopathological Images Based on Hybrid Feature Set", *Current medical imaging*, Vol. 17, pp. 136-147, [SCI : IF 0.182]

2020 I M Nasir, M A Khan, M Yasmin, **J.H. Shah**, M Gabryel, R Scherer, R Damaševičius, "Pearson Correlation-Based Feature Selection for Document Classification Using Balanced Training", *Sensors*, Vol. 20, pp. 6793, [SCI : IF 3.275]

2020 U Yasmeen, **J.H. Shah**, M. A. Khan, A G Jillani, S ul Rehman, M Sharif, S Kadry, N Yunyoung, "Text Detection and Classification from Low Quality Natural Images", *Intelligent Automation and Soft Computing* , Vol. 26, pp. 1251-1266, [SCI : IF 1.276]

2020 H Khan, M Sharif, N Bibi, M Usman, SA Haider, S Zainab, **J. H. Shah**, "Localization of radiance transformation for image dehazing in wavelet domain", *Neurocomputing* , Vol. 381, pp. 141-151, [SCI : IF 4.438]

2020 M. Nisa, **J. H. Shah**, S. Kanwal, M. Raza, M. A. Khan, R. Damaševičius, T. Blažauskas, "Hybrid Malware Classification Method Using Segmentation-Based Fractal Texture Analysis and Deep Convolution Neural Network Features", *Applied Sciences* , Vol. 10, pp. 77-85, [SCI : IF 2.474]

2020 GJ Ansari**, J. H. Shah**, M Sharif, S ur Rehman, "A novel approach for scene text extraction from synthesized hazy natural images", *Pattern Analysis and Applications*, Vol. 23, pp. 1305-1322, [SCI : IF 1.512]

2020 IM Nasir, M Rashid, **J. H. Shah**, M Sharif, MYH Awan, MH Alkinani, "An Optimized Approach for Breast Cancer Classification for Histopathological Images Based on Hybrid Feature Set", *Current medical imaging*, Vol. 381, pp. 141-151, [SCI : IF 0.812]

2020 M Sharif, MA Khan, F Zahid, **J. H. Shah**, T Akram, "Human action recognition : a framework of statistical weighted segmentation and rank correlation-based selection", *Applied Sciences* , Vol. 23, pp. 281-294,[SCI : IF 1.512]

2020 M A. Khan, S. R, A. Kashif, M. I. Sharif, Nazeer M., **J. H. Shah**, Y.D. Zhang, S.C S, "Lungs cancer classification from CT images : An integrated design of contrast based classical features fusion and selection", *Pattern Recognition Letters* , Vol. 129, pp. 77-85, [SCI : IF 2.810]

2019 A Adeel, MA Khan, M Sharif, F Azam, **J. H. Shah**, T Umer, S Wan, "Diagnosis and recognition of grape leaf diseases : An automated system based on a novel saliency approach and canonical correlation analysis based multiple features fusion", **Sustainable Computing : Informatics and Systems** , Vol. 24, pp. 1-11, [SCI : IF 2.798]

2019 M. Fayyaz, M. Yasmin, M. Sharif, J. H. Shah, M. Raza, T. Iqbal, "Person re-identification with features-based clustering and deep features", *Neural Computing and Applications* , pp.1-22, [SCI : IF 4.664]

2019 U. Iqbal, T. Ying, M. H Rehman, **J. H. Shah**, "Prediction analytics of myocardial infarction through modeldriven deep deterministic learning", *Neural Computing and Applications* , pp.1-20, [SCI : IF 4.664]

2019 Arooj Safdar, M.A. Khan, **J.H. Shah**, M. Sharif, T.Saba, A. Rehman, K.J Junaid, "Intelligent microscopic approach for identification and recognition of citrus deformities", *Microscopy Research and Technique*, pp.1542-1556 [SCI : IF 1.147]

2019 I. Naz, M. Nazeerad, M. Yasmin, M. Sharif, **J.H. Shah** And S. L.," Robust Discrimination of Leukocytes Protuberant Types for Early Diagnosis of Leukemia", *Journal of Mechanics in Medicine and Biology*, vol. 19, no. 06. [SCI : IF 0.92]

2019 Muhammad S., Muhammad A.K., Farooq Z., **J.H. Shah**, Tallha A., "Human action recognition : a framework of statistical weighted segmentation and rank correlation-based selection", *Pattern Analysis and Applications*, pp. 1-7 [SCI : IF 1.281]

2019 M. Sharif, **J.H. Shah**, "Automatic Screening of Retinal Lesions for Grading Diabetic Retinopathy", *IAJIT – The International Arab Journal of Information Technology*, [ISI : IF 0.724]

2018 G. J. Ansari, **J.H. Shah**, M. Yasmin, M. Sharif S. L. Fernandes, "A novel machine learning approach for scene text extraction", *Future Generation Computer Systems*, Vol. 57, pp. 328-340 [SCI : IF 4.639]

2018 A. LIAQAT, M.A. Khan, **J.H. Shah**, M. Sharif, M. Yasmin, S. L. Fernandes "Automated Ulcer and Bleeding Classification From WEC Images Using Multiple Features Fusion And Selection" *Journal of Mechanics in Medicine and Biology*. [SCI : IF 0.92]

2018 Z Iqbal, M. A. Khan, M. Sharif, **J.H. Shah**, M. H. Rehman, K. Javed , "An automated detection and classification of citrus plant diseases using image processing techniques : A review", *Computers and Electronics in Agriculture* Vol. 153, pp. 12-32 [SCI : IF 2.427]

2017 **J.H. Shah**, Z Chen,M Sharif, M Mussart, Steven L.F "A novel biomechanics-based approach for person reidentification by generating dense color sift salience features", *Journal of Mechanics in Medicine and Biology*, Vol. 17, No. 4 , 2017. [SCI : IF 0.92]

2017 **J.H. Shah**, Z Chen,M Sharif, M Mussart, Steven L.F "A novel biomechanics-based approach for person reidentification by generating dense color sift salience features", *Journal of Mechanics in Medicine and Biology*, Vol. 17, No. 4 , 2017. [SCI : IF 0.92]

2017 J.H. Shah, M Sharif, M Mussart, Steven L.F, "Facial expressions classification and fakse labek reduction using LDA and threefold SVM", *Pattern recognition letters* [online SCI : IF 1.995]

2016 **J.H. Shah**, M Lin, Z Chen "Multi-camera handoff for person re-identification", *Neurocumputing*, Vol. 19, pp. 238-248,[SCI : IF 2.392]

Projects

Project Title	PI/Co-PI	Amount (Rs)	Agency	Duration	Status:
Drone Robotic Fish for Flowing Water	**PI**	3,446,711/-	HEC-NRPU	3 years	Continue

Disease Detection and Analysis					
Robotic Drone Fish	**PI**	70,000/-	National Grassroot ICT Research Initiative (NGIRI)	6 Months	Completed
Automated human behavior analysis from distributed non-overlapping cameras network	**PI**	464500/-	HEC-SRGP	10 Months	Completed

Research Thesis Supervision

#	Student Name	Thesis Title	MS/PhD	Supervisor / Co-Supervisor
1	Ghulam Jillani Ansari	Natural Scene Text Understanding using Machine learning	PhD	Supervisor/Graduated
2	Sara Khalid	Traffic Sign Detection and Recognition (TSDR) in Uncontrolled Environment	PhD	Supervisor/Graduated
3	Nauman Qadeer	Tracking Mechanically Thrown Objects for Intelligent Industrial Catching Robot	PhD	Supervisor/Graduated
4	Safdar Khan	Suspicious Human Activity Recognition Using Machine Vision	PhD	Supervisor/Graduated
5	Rabia Saleem	Machine Learning Based Analysis of Agricultural Images for the Detection of Diseases	PhD	Supervisor/Graduated
6	Isra Naz	Road Signs and Text Analysis from Natural Scene Images for Autonomous Vehicles	PhD	Supervisor/In progress
7	Inzamam Mashood Nasir	Human Action Recognition Through Video Surveillance in uncontrolled Environments	PhD	Co-supervisor/ Graduated
8	Hassan Ishfaq	Novel Way to Detect Known and Unknown Malware Attacks Prediction and Classification using Machine Learning	PhD	Register
9	Fouzia Jabeen	TBA	PhD	Register
10	Amjid Usman	TBA	PhD	Register
11	Hafiz Muhammad Naveed Ahmad	Seven Classes Skin Lesion Classification using Deep Features Fusion and Neural Network	MS	Supervisor
12	Syed Hassaan Ali Shah	Road Scene Text Detection and Recognition using Machine Learning	MS	Supervisor
13	Sobia Bibi	Multiclass Skin Lesion Recognition using Deep Learning and Explainable AI	MS	Supervisor
14	Nabeela Yaqoob	Classification of Alzheimer's Disease Stages Based on Multi Feature Fusion	MS	Supervisor
15	Faisal Rauf	Metal Parts Defects Detection in Industry 4.0 using Machine Learning Technique	MS	Supervisor
16	Rabia Rehman	Detection and analysis of suspicious behavior by using Person re-identification model	MS	Supervisor

17	Maira Afzal	Automated Soccer Event Detection and Highlight Generation for short and Long View	MS	Supervisor
18	Muhammad Arslan Touqeer	Weed Detection in Soya Bean Crops using Machine Learning	MS	Supervisor
19	Muhammad Faizan Saqlain	DNN Vulnerability and Robustness Against Adversarial Exposure on Diabetic Retinopathy Images	MS	Supervisor
20	Muhammad Ahsan Zia Janjua	Blood Cells Classification by Mean Use of Genetic Algorithm for Optimizing Deep Learning	MS	Supervisor
21	Muhammad Shahid Amin	Deep Neural Network Robustness Against Adversarial Attack in WCE Images	MS	Supervisor
22	Fahad Ahmed Khokhar	A Realistic Approach of Deep Learning Towards Rapid Detection and Classification of Live Bacteria	MS	Supervisor
23	Syeda Sania Najam	Automated Natural Scene to Caption Generation Using Deep Learning	MS	Supervisor
24	Yousma Mushtaq	Multiple Object Detection based on Super-Resolution (SR)	MS	Supervisor
25	Syeda Fatima Zehra	Myocardial Infraction Classification Based on Signal-to-Image Transformation Using Machine Learning	MS	Supervisor
26	Ayaz Ahmed	Multi-Class Weed Segmentation and Classification using Convolutional Neural Network	MS	Co-Supervisor
27	Marryam Nisa	Malware Recognition and Classification Using Deep Convolution Neural Network and image processing techniques	MS	Supervisor
28	Shansa Kanwal	Adversarial Haze Attack and Defense for Person Re- Identification	MS	Supervisor
29	Usama Tahir	Adversarial Attacks defense System on Road Sign using Machine Learning	MS	Supervisor
30	Umair Ahmed	Defense Against Adversarial Attack on Medical Imaging	MS	Supervisor
31	Muhammad Awais Khan	Person Re-identification in a Foggy or Hazy Scene: A Joint Selection andFusion Strategy of Alexnet, VGG-16, Local Maximum Occurrence and Color Features	MS	Co-Supervisor
32	Sheeba Lal	Adversarial Attack and their defense in Diabetic retinopathy	MS	Co-Supervisor
33	Saba Perveen	Defensive model for Adversarial attacks in Human Action Recognition	MS	Co-Supervisor
34	Asim Shahzad	Analyzing White Blood Cells using Machine Learning	MS	Co-Supervisor
35	Khadija Bibi	Classification of Olive Leaves Using Deep Convolutional Neural Network and Multi-Feature Fusion	MS	Co-Supervisor
36	Ghazi Islam Khan	Apple leaf containing noise and illumination effects, disease spot segmentation	MS	Co-Supervisor
37	Amna Liaqat	An Automated Segmentation and Classification of Ulcer and Bleeding Region using Hybrid Features	MS	Supervisor

38	Unber Riaz	Image based content writing using deep learning	MS	Supervisor
39	Arooj Safdar	Detection and classification of citrus plants disease based on optimized color and texture features	MS	Supervisor
40	Sundas Aziz	Texture image classification based on feature fusion and optimization using deep convolutional neural networks	MS	Supervisor
41	Ujala Yasmeen	Understanding text from low quality natural scene images using machine learning	MS	Supervisor
42	Riffat Perveen	Natural Scene understanding and classification under haze environment	MS	Co- Supervisor
43	Kinza Pervaiz Haider	Human action recognition in videos	MS	Co- Supervisor
44	Faiza Eba Batool	Offline signature verification: A novel feature technical of gray level co-occurrence matrix and geometric features using support vector machine	MS	Co- Supervisor
45	Mosin Khan	Automated identification and classification of rice grains using machine learning	MS	Co- Supervisor
46	Inzamam Mashood Nasir	Image based document classification using machine learning	MS	Co- Supervisor
47	Ummal Baneen	Fusion and selection strategy of color and tecture feature for skin lesion detection and classification	MS	Co- Supervisor
48	Muhammad Sohaib Rafique	Melanoma Segmentation and classification using dermoscopy images	MS	Co- Supervisor
49	Samina Parveen	Honey Types Detection and classification using Microscopic Images Trrough Deep Net Technique	MS	Supervisor
50	Izzah Fatima	Visual Question Answering System for Microscopic Blood Cell Images using Deep Learning	MS	Supervisor
51	Iqra Bibi	Deep Learning-Based Virtual Question Answering System for Citrus Leaf Disease Identification	MS	Supervisor
52	Rimsha Saboor	Emprowering Agriculture: Tomato Leaf Disease Detection via Visual Question Answering System	MS	Co- Supervisor
53	S. Sultan Mouzim	A Transformer-Based computer vision approach to diagnose gastrointestinal disease	MS	Co- Supervisor
54	Javaria	Sentence Embedding to improve text classification for different tasks	MS	Co- Supervisor

References

Dr. Muhammad Sharif
Professor
Department of Computer Science
COMSATS University Islamabad, Wah Campus
Email: muhammadsharifmalik@yahoo.com

Dr. Chen Zonghai
Professor
Department of Automation
University of Science and Technology of China
Email: chenzh@ustc.edu.cn