

Dr. Sheeraz Arif

Associate Professor

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Specialization: Computer Vision and Pattern Recognition

Education: PhD – Information and Communication Engineering

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Profile

Dr. Sheeraz has received Ph.D. degree in Information and Communication Engineering from Beijing Institute of Technology, Beijing, P.R. China under the Chinese Government Scholarship. He has completed his MS in Telecommunication and Computer Network Engineering from London South Bank University, London UK. His research interests include Video Analysis, Computer Vision and Pattern Recognition, Machine and Deep Learning. He has published over 10 research articles in journal and conference of high repute. He is also associated with the Research Institute of Communication Technology (RICT Lab) in Beijing Institute of Technology.

Research Interests

1. Image and Video Contents analysis
2. Machine Learning/Deep Learning
3. Pattern Recognition

Selected Publications

Peer Reviewed Journal Articles:

- **Sheeraz Arif** Jing Wang, Adnan Ahmed Siddiqui. “Bi-directional LSTM with Saliency-aware 3D-CNN features for Human Action Recognition”. *Submitted in Journal of Engineering Research*. (**Accepted**, 25 March, 2020)
Journal Citation Reports (JCR), ISI Indexed / SCIE, Impact Factor (IF)
- **Sheeraz Arif**, Jing Wang, Zesong Fei, Tehseen-ul-Hassan and Fida Hussain. “Video Representation via Fusion of Static and Motion Features Applied to Human Activity Recognition”. *KSII Transactions on Internet and Information Systems*. 13(7) 30, July 2019, pp. 3599-3619.
- **Sheeraz Arif**, Jing Wang, Fida Hussain, and Zesong Fei. “Trajectory based 3D Convolutional Descriptors for Action Recognition in Videos”. *Journal of Information Science and Engineering*, 35(4) July 2019, pp. 851-870.
- Hui Liu, Fida Hussain, Yue Shen, **Sheeraz Arif**, Aamir Nazir, Muhammad Abubakar. “Complex power quality disturbances classification via curvelet transform and deep learning”. *Electric Power Systems Research*. October, 169, pp.1-9, 2018.
- **Sheeraz Arif**, Jing Wang, Tehseen Ul Hassan, and Zesong Fei. “3D-CNN-Based Fused Feature Maps with LSTM Applied to Action Recognition”. *Innovative Topologies and Algorithms for Neural Networks, Future Internet* (MDPI), 11(2), February, 2019.

- **Sheeraz Arif**, Tehseen Ul-Hassan, Fida Hussain, Jing Wang, and Zesong Fei. “Video representation by dense trajectories motion map applied to human activity recognition”. *International Journal of Computers and Applications*, 42(5), 27, June, 2018, pp. 474-484.
- Tehseen Ul Hassan, Fei Gao, Babur Jalal, and **Sheeraz Arif**. “Direction of Arrival Estimation Using Augmentation of Coprime Arrays”. *Information and Communications Technology, Information (MDPI)*, November, 9(11), 2018.
- Tehseen Ul Hassan, Fei Gao, Babur Jalal, and Sheeraz Arif. “Interference Management in Femtocells by the Adaptive Network Sensing Power Control Technique”. *Massive MIMO Communication and Networking Systems, Future Internet (MDPI)*, 10(3), March, 2018.
- Tri Daryanto, **Sheeraz Arif**, Shu Yang. “Survey: Recent Trends and Techniques in Image Co-Segmentation Challenges, Issues and Its Applications”. *International Journal of Computer Science and Software Engineering (IJCSSE)*. May, 6(5): 99-114, 2017.
- Rashid Hussain, **Sheeraz Arif**, Muhammad Sikander, and Abdul Rehman Memon. “Fuzzy Clustering based Malignant Areas Detection in Noisy Breast Magnetic Resonant (MR) Images”. *International Journal of academic research*, March 2011, 3(2): 64-71.

Peer Reviewed International Conferences:

- Yifan Liu, Yao Sun, Xin'ge Yan, Qiao Li, Fei Wang, and **Sheeraz Arif**. “QoE-Driven Multi-service Resource Scheduling Strategy in Mobile Network”. *Proceedings of the 2nd International Conference on Communication and Information Processing (ICCIP '16)*, Singapore, November 2016, pp. 233-237. (ACM Digital Library)
 - (<http://dx.doi.org/10.1145/3018009.3023387>)
- **Sheeraz Arif**, Jing Wang, and Zesong Fei. “3-dimensional convolution-based iterative model for efficient motion map generation for representing video discriminative information”. *International IEEE Conference on Virtual Reality and Visualization (ICVRV)*, Zhengzhou, P.R. China, May 2019.
 - (<https://doi.10.1109/ICVRV.2017.00111>)
- Asad Ullah, Shahid Anwar, Jing Wang, and **Sheeraz Arif**. “Nonlinear Manifold Feature Extraction based on Spectral Supervised Canonical Correlation Analysis for Facial Recognition with RRN”. *The International Conference on Pattern Recognition and Artificial Intelligence (PRAI 2018)*.