MUHAMMAD SHEHZAD HANIF

Assistant Professor, Department of Electrical and Computer Engineering, King Abdulaziz University

Education

Degree	Field of Study	Institution	Year
Ph.D.	Computer Engineering	University of Paris 6, France	2009
MS	Engineering Sciences	University of Paris 6, France	2006
BS	Electrical Engineering	University of Engineering and Technology, Lahore, Pakistan	2001

Academic Experience

From To	Institution	Rank Title	Full or Part Time
2012-Date	King Abdulaziz University	Assistant Professor	Full Time
2010-2012	University of Engineering and Technology Lahore, Pakistan	Assistant Professor	Full Time

Non-Academic Experience *(Including Consultations)*

From	To	Company/Entity	Title	Position Description (Brief)	Full or Part Time
2001	2003	Communication Enabling Technologies – AVAZ Networks, Islamabad, Pakistan	DSP Software Engineer	Implementation and optimization of voice and video codecs for DSP processors	Full Time
2003	2004	Centre for Advance Research in Engineering (Pvt) Ltd, Islamabad, Pakistan	Design Engineer	Team leader. Design of image binarization and matching techniques	Full Time
2004	2005	Re-Engineering with Research (Pvt) Ltd, Islamabad, Pakistan	Senior Design Engineer	Design and realization of source separation algorithms using clustering	Full Time

Funded Research Projects and Patents From The Last Five Years

"HW-SW Co-Design of SLAM for Mobile Robots" Center of Excellence in Intelligent Engineering Systems (CEIES), PI, 2016

"Gyro-Stabilized Platform Design and Air-to-Ground Video Target Tracking in Urban Environment" KACST Advanced and Strategic Technologies Program, Co-PI, 2014

Certifications and Professional Registrations

Registered as Professional Engineer with Pakistan Engineering Council.

Honors and Awards

1. Among top 10 graduates of Electrcial Engineering Department, University of Engineering and Technology, Lahore, Pakistan, 2001

2. Winner of scholarship for Ph.D. by Higher Education Commission of Pakistan, 2005

Institutional and Professional Services

1. Member of ABET Committee at Department of Electrical and Computer Engineering, King Abdulaziz University, Jeddah, Saudi Arabia

2. Secretary and member of Post-Graduate Research Committee at Department of Mechatronics Engineering, University of Engineering and Technology, Lahore, Pakistan, 2010-2012

3. Reviewer for the following journals and conferences
   a. IET Computer Vision, IET Image Processing – (2017 - 2020)
   b. International Conference on Latest Trends in Electrical Engineering & Computing Technologies (INTELLECT) – (2017,2019)
   c. International Conference on Man-Machine Interactions (ICMMI) – (2017,2019)
   d. Mediterranean Conference on Pattern Recognition and Artificial Intelligence (MedPRAI) – (2016, 2018)

Principal Publications/Presentations from the Past Five Years

1. Bilal, M. and Hanif, M. S. (2020). *Benchmark Revision for HOG-SVM Pedestrian Detector through Reinvigorated Training and Evaluation Methodologies.* IEEE Transactions on Intelligent Transport Systems. 21(3), Pages: 1277 – 1287.
2. Hanif, M. S. and Bilal, M. (2020). *Competitive Residual Neural Network for Image Classification*. ICT Express. 6(1), Pages: 28-37
3. Yousaf, A., Hanif, M. S., Khan, M.J., Iqbal, M. and Khurshid, K. (2019). *Robust and Computationally Efficient Online Image Stabilization Framework based on Adaptive Dual Motion Vector Integration.* IET Computer Vision. 13(5), Pages: 461 – 468.
4. Saleem, M. S., Khan, M.J., Khurshid, K and Hanif, M. S. (2019). *Crowd Density Estimation in Still Images using Multiple Local Features and Boosting Regression Ensemble.* Neural Computing and Applications.
5. Hanif, M. S. (2019). *Similarity Learning for Person Reidentification using Projected Gradient Method.* SPIE Journal of Electronic Imaging.
6. Hanif, M. S. (2019). *Patch match networks: Improved two-channel and Siamese networks for image patch matching.* Pattern Recognition Letters. 120(1), Pages: 54-61.
7. Bilal, M. and Hanif, M. S. (2019). *High Performance Real-Time Pedestrian Detection Using Light Weight Features and Fast Cascaded Kernel SVM Classification.* Journal of Signal Processing Systems. 91(2), Pages: 117-129.
8. **Hanif, M.S., Bilal, M., Munawar, K. and Balamash, A.S. (2018).** *Implementation of an Embedded Testbed for Indoor SLAM.* IEEE/ACS 15th International Conference on Computer Systems and Applications (AICCSA). Pages: 1- 8.