

# Chen Chen

## Postdoc Associate

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### EDUCATION

#### The University of Texas at Dallas (UTD), Richardson, Texas, USA

- Ph.D. in Electrical Engineering Aug 2012 – May 2016
  - Thesis: Fusion of Depth and Inertial Sensing for Human Action Recognition
  - Advisers: Prof. Nasser Kehtarnavaz (UTD) and Prof. Roozbeh Jafari (Texas A&M University)
  - GPA: 4.0/4.0

#### Mississippi State University, Starkville, Mississippi, USA

- M.S. in Electrical Engineering Aug 2009 – May 2012
  - Thesis: Multihypothesis Prediction for Compressed Sensing and Super-resolution of Images
  - Adviser: Prof. James Fowler
  - GPA: 3.72/4.0

#### Beijing Forestry University, Beijing, China

- B.S. in Automation Sep 2005 – Jun 2009
  - GPA: 87/100

### RESEARCH INTERESTS

- § Computer vision and machine learning
  - Deep learning (Deep Autoencoder, Deep CNN, Deep LSTM, Generative Model), Sparse representation, Human action recognition, Semantic segmentation, Multimodal fusion
- § Signal, image and video processing
  - Compressive sensing, Image compression and reconstruction, Image super-resolution
- § Remote sensing
  - Hyperspectral image semantic segmentation, Land-use scene classification, Geo-localization

### RESEARCH EXPERIENCE

#### Center for Research in Computer Vision, University of Central Florida Jul 2016 – present

- Postdoc Associate, Supervisor: Prof. Mubarak Shah
  - **Project #1: Studying the Impact of Video Analytics for Pre, Live and Post Event Analysis on Outcomes of Criminal Justice** (funded by National Institute of Justice)
    - ◊ Led a team of PhD students to develop deep learning algorithms for action recognition, action localization, and anomalous event detection in surveillance videos.
    - ◊ Collected a large-scale dataset, consisting of real-world surveillance videos of a variety of realistic anomalies, such as robbery, burglary, etc.
    - ◊ Developed a computer vision system that incorporates different computer vision modules for Public Safety Visual Analytics.
  - **Project #2: Large Scale Image Geo-localization using Cross-view Image Matching** (funded by National Geospatial-Intelligence Agency)
    - ◊ Developed deep learning algorithms for geo-localizing Google street-view images by matching them to geo-tagged reference images in a different view (oblique view or nadir view).

#### Signal and Image Processing Lab, University of Texas at Dallas

Aug 2012 – May 2016

- **Project #1: Improving Human Action Recognition Using Fusion of Depth Camera and Inertial Sensors**
  - ◊ Developed real-time human action recognition algorithm and system based on two differing modality sensors consisting of a depth camera and an inertial body sensor.
  - ◊ Created a publicly available multimodal human action dataset, consisting of four temporally synchronized data modalities (RGB videos, depth videos, skeleton positions, and inertial signals) from a Kinect camera and a wearable inertial sensor.
- **Project #2: Fusion of Depth and Inertial Sensing for Assistive Living**
  - ◊ Deployed depth and inertial sensing for assistive living applications. Developed (1) a home-based Senior Fitness Test (SFT) measurement system for elderly, and (2) a medication adherence monitoring system, by using an inertial sensor and a depth camera.

#### Geosystems Research Institute, Mississippi State University

Aug 2011 – May 2012

- Research Assistant, Supervisor: Prof. James E. Fowler
  - **Project: Multihypothesis Prediction for Compressed Sensing, Image Super-resolution, and Hyperspectral Image Classification**

- ◊ Developed a block based compressed sensing algorithm for image and video recovery using multi-hypothesis prediction. It became a benchmark algorithm for compressed sensing image recovery.
- ◊ Extended the multi-hypothesis prediction scheme for single image super-resolution and hyperspectral image classification (pixel-wise labeling).

## TEACHING & MENTORING EXPERIENCE

### Course Instructor

Spring 2018

- Department of Computer Science, University of Central Florida
  - Course: CAP4453-18Spring 0W61 – Robot Vision (total enrollment: 45 students)

### Graduate Teaching Assistant

Aug 2009 – Aug 2011

*My responsibilities as a teaching assistant included teaching a weekly recitation section, holding office hours, grading homework, and supervising team-based final projects.*

- Department of Electrical and Computer Engineering, Mississippi State University
  - Course: ECE 3443 Signal and System (Summer 2010, Fall 2010, Summer 2011, Spring 2011)
  - Course: ECE 3413 Introduction to Electronic Circuits (Fall 2009, Spring 2010, Summer 2010)
  - Course: ECE 3183 Electric Engineering Systems (Spring 2011)
- Department of Mathematics and Statistics, Mississippi State University
  - Course: ST 6523 Introduction to Probability (Fall 2010)

### Research Mentor

Summer 2017

*Research Experiences for Undergraduates (REU) program in the area of Computer Vision, funded by NSF.*

- Center for Research in Computer Vision, University of Central Florida
  - Zack While, undergraduate at Youngstown State University
  - Project: Video Object Segmentation Using Deep Learning

## GRANT PROPOSAL WRITING EXPERIENCE

*I have contributed the major portion of a few grant proposals and proposal white papers.*

- Development of a Computer Assisted Senior Fitness Test System (NIH R21)
  - Contributed the literature review and methodology parts of the proposal
- Creation of Operationally Realistic 3D Environment (IARPA)
  - Contributed part of the methodology of the proposal
- Advanced Geospatial Analytics (National Geospatial-Intelligence Agency)
  - Contributed proposal white paper

## AWARDS & SCHOLARSHIPS

- 2016 David Daniel Fellowship Award (best dissertation award), University of Texas at Dallas, May 2016.
- Top 10% Award, “UTD-MHAD: A Multimodal Dataset for Human Action Recognition Utilizing a Depth Camera and a Wearable Inertial Sensor,” *IEEE International Conference on Image Processing (ICIP)*, Quebec city, Canada, September 2015.
- PhD Research Small Grant Award, the Office of Vice President for Research, University of Texas at Dallas, November 2014.
- Certificate of Recognition of Inventive Contribution, in recognition of inventive contribution to the University of Texas at Dallas between September 1, 2012 and August 31, 2013, issued by UT-Dallas Office of Technology Commercialization, March 2014.
- Jonsson School Graduate Study Scholarships, University of Texas at Dallas, September 2012.
- Beijing Forestry University First-class Scholarship, 2007-2009.

## PUBLICATIONS

I have **1377** citations according to **Google Scholar** as of 01/12/2018 (**h-index = 20; i-10 index = 33**). My Google Scholar Profile: <https://scholar.google.com/citations?user=TuEwcZ0AAAAAJ&hl=en>

### PREPRINT

- [1] V. Gunasekaran, **C. Chen**, M. Shah, “Aerial to Street View Image Geo-localization Using Deep NaSNet,” submitted to CVPR 2018.
- [2] W. Sultani, **C. Chen**, M. Shah, “Real-world Anomaly Detection in Surveillance Videos,” arXiv preprint, submitted to CVPR 2018. [Project and dataset website: <http://crcv.ucf.edu/cchen/>]
- [3] R. Hou, **C. Chen**, M. Shah, “An End-to-end 3D Convolutional Neural Network for Action Detection and Segmentation in Videos,” arXiv preprint, arXiv:1712.01111 [cs.CV], submitted to IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI).

### BOOK CHAPTER

[B-1] J. Shen, S. Cheung, **C. Chen**, and R. Liu, "Missing Depth Data In-painting," In *Encyclopedia of Image Processing*, published by Taylor & Francis Group, 2018, to appear.

#### JOURNAL PAPER

- [J-1] B. Zhang, J. Gu, **C. Chen**<sup>†</sup>, J. Han, X. Su, X. Cao, and J. Liu, "One-two-one Networks for Compression Artifacts Reduction in Remote Sensing," *ISPRS Journal of Photogrammetry and Remote Sensing*, 2018. [**Impact Factor (IF) = 6.387**] (<sup>†</sup> corresponding author)
- [J-2] B. Zhang, S. Luan, **C. Chen**, J. Han, W. Wang, A. Perina, and L. Shao, "Latent Constrained Correlation Filter," *IEEE Transactions on Image Processing (TIP)*, 2017. [**Impact Factor (IF) = 4.828**]
- [J-3] **C. Chen**, M. Liu, H. Liu, B. Zhang, J. Han, and N. Kehtarnavaz, "Multi-Temporal Depth Motion Maps-Based Local Binary Patterns for 3D Human Action Recognition," *IEEE Access*, 2017. [**IF = 3.244**]
- [J-4] Z. Wang, R. Hu, **C. Chen**, Y. Yu, J. Jiang, C. Liang, and S. Satoh, "Person Re-identification via Discrepancy Matrix and Matrix Metric," *IEEE Transactions on Cybernetics*, 2017. [**IF = 7.384**]
- [J-5] M. Liu, H. Liu, and **C. Chen**, "Robust 3D Action Recognition through Sampling Local Appearances and Global Distributions," *IEEE Transactions on Multimedia (TMM)*, 2017. [**IF = 3.509**]
- [J-6] L. Yang, C. Li, J. Han, **C. Chen**, Q. Ye, B. Zhang, X. Cao, and W. Liu, "Image Reconstruction via Manifold Constrained Convolutional Sparse Coding for Image Sets," *IEEE Journal of Selected Topics in Signal Processing*, 2017. [**IF = 5.301**]
- [J-7] Y. Yang, B. Zhang, **C. Chen**, J. Han, and L. Shao, "Action Recognition Using 3D histograms of Texture and A Multi-class Boosting Classifier," *IEEE Transactions on Image Processing (TIP)*, 2017.
- [J-8] X. Bian, **C. Chen**, L. Tian, and Q. Du, "Fusing Local and Global Features for High-Resolution Scene Classification," *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 2017. [**IF = 2.913**]
- [J-9] M. Liu, H. Liu, and **C. Chen**, "Enhanced Skeleton Visualization for View Invariant Human Action Recognition," *Pattern Recognition*, 2017. [**IF = 4.582**]
- [J-10] M. Liu, H. Liu, and **C. Chen**, "3D Action Recognition Using Multi-scale Energy-based Global Ternary Image," *IEEE Transactions on Circuits and Systems for Video Technology*, 2017. [**IF = 3.599**]
- [J-11] J. Jiang, **C. Chen**, Y. Yu, X. Jiang, and J. Ma, "Spatial-Aware Collaborative Representation for Hyperspectral Remote Sensing Image Classification," *IEEE Geoscience and Remote Sensing Letters*, 2017. [**IF = 2.761**]
- [J-12] **C. Chen**, K. Liu, and N. Kehtarnavaz, "Real-Time Human Action Recognition Based on Depth Motion Maps," *Journal of Real-Time Image Processing*, 2016.
- [J-13] X. Bian, **C. Chen**, Q. Du, and Y. Xu, "Robust Hyperspectral Image Classification by Multi-layer Spatial-spectral Sparse Representations," *Remote Sensing*, 2016. [**IF = 3.244**]
- [J-14] J. Jiang, X. Ma, **C. Chen**, T. Lu, and R. Hu, "Single Image Super-Resolution via Locally Regularized Anchored Neighborhood Regression and Nonlocal Means," *IEEE Transactions on Multimedia (TMM)*, 2016.
- [J-15] J. Jiang, J. Ma, **C. Chen**, Z. Cai, and R. Hu, "Noise Robust Face Image Super-resolution through Smooth Sparse Representation," *IEEE Transactions on Cybernetics*, 2016.
- [J-16] J. Jiang, **C. Chen**, J. Fu, and R. Hu, "SRLSP: A Face Image Super-Resolution Algorithm using Smooth Regression with Local Structure Prior," *IEEE Transactions on Multimedia*, 2016.
- [J-17] L. Huang\*, **C. Chen**\*, W. Li, Q. Du, "Remote Sensing Image Scene Classification Using Multi-scale Completed Local Binary Patterns and Fisher Vectors," *Remote Sensing*, 2016. (\*equal contribution)
- [J-18] J. Jiang, **C. Chen**, K. Huang, Z. Cai, and R. Hu, "Noise Robust Position-Patch based Face Super-Resolution via Tikhonov Regularized Neighbor Representation," *Information Sciences*, 2016. [**IF = 4.832**]
- [J-19] **C. Chen**, B. Zhang, Z. Hou, J. Jiang, M. Liu, and Y. Yang, "Action Recognition from Depth Sequences Using Weighted Fusion of 2D and 3D Auto-Correlation of Gradients Features," *Multimedia Tools and Applications*, 2016.
- [J-20] **C. Chen**, R. Jafari, and N. Kehtarnavaz, "A Survey of Depth and Inertial Sensor Fusion for Human Action Recognition," *Multimedia Tools and Applications*, 2016.

- [J-21] J. Zou, W. Li, **C. Chen**, and Q. Du, "Scene Classification Using Local and Global Features with Collaborative Representation Fusion," *Information Sciences*, 2016.
- [J-22] **C. Chen**, R. Jafari, and N. Kehtarnavaz, "A Real-Time Human Action Recognition System Using Depth and Inertial Sensor Fusion," *IEEE Sensors Journal*, 2016. **[IF = 2.512]**
- [J-23] **C. Chen**, B. Zhang, H. Su, W. Li, and L. Wang, "Land-Use Scene Classification Using Multi-Scale Completed Local Binary Patterns," *Signal, Image and Video Processing*, 2015.
- [J-24] W. Li, **C. Chen**, H. Su, and Q. Du, "Local Binary Patterns and Extreme Learning Machine for Hyperspectral Imagery Classification," *IEEE Transactions on Geoscience and Remote Sensing*, 2015. **[IF = 4.942]**
- [J-25] **C. Chen**, R. Jafari, and N. Kehtarnavaz, "Improving Human Action Recognition Using Fusion of Depth Camera and Inertial Sensors," *IEEE Transactions on Human-Machine Systems*, 2015. **[IF = 2.493]**
- [J-26] Z. Zhu, F. Guo, H. Yu, and **C. Chen**, "Fast Single Image Super-Resolution via Self-Example Learning and Sparse Representation," *IEEE Transactions on Multimedia*, 2014.
- [J-27] **C. Chen**, W. Li, H. Su, and K. Liu, "Spectral-Spatial Classification of Hyperspectral Image based on Kernel Extreme Learning Machine," *Remote Sensing*, 2014.
- [J-28] K. Liu, **C. Chen**, R. Jafari, and N. Kehtarnavaz, "Fusion of Inertial and Depth Sensor Data for Robust Hand Gesture Recognition," *IEEE Sensors Journal*, 2014.
- [J-29] **C. Chen**, W. Li, E. W. Tramel, M. Cui, S. Prasad, and J. E. Fowler, "Spectral-Spatial Preprocessing Using Multihypothesis Prediction for Noise-Robust Hyperspectral Image Classification," *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing*, 2014.
- [J-30] **C. Chen**, W. Li, E. W. Tramel, and J. E. Fowler, "Reconstruction of Hyperspectral Imagery from Random Projections Using Multihypothesis Prediction," *IEEE Transactions on Geoscience and Remote Sensing*, 2014.

#### CONFERENCE PAPER

- [C-1] S. Luan, B. Zhang, S. Zhou, **C. Chen**, J. Han, W. Yang, and J. Liu, "Gabor Convolutional Networks," *IEEE Winter Conference on Applications of Computer Vision (WACV)*, 2018.
- [C-2] R. Hou, **C. Chen**, and M. Shah, "Tube Convolutional Neural Network (T-CNN) for Action Detection in Videos," *International Conference on Computer Vision (ICCV)*, Venice, Italy, 2017.
- [C-3] **C. Chen**, B. Zhang, A. Del Bue, and V. Murino, "Manifold Constrained Low-Rank Decomposition," *International Conference on Computer Vision Workshop (ICCV Workshop)*, Venice, Italy, 2017.
- [C-4] Y. Tian, **C. Chen**, and M. Shah, "Cross-View Image Matching for Geo-localization in Urban Environments," *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Honolulu, HI, 2017.
- [C-5] J. Qin, L. Liu, L. Shao, B. Ni, **C. Chen**, F. Shen, and Y. Wang, "Binary Coding for Partial Action Analysis with Limited Observation Ratios," *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, Honolulu, HI, 2017.
- [C-6] H. Chen, J. Chen, **C. Chen**, and R. Hu, "Action Recognition with Gradient Boundary Convolutional Network," *IEEE International Conference on Image Processin (ICIP)*, Beijing, China, 2017.
- [C-7] N. Dawar, **C. Chen**, R. Jafari, and N. Kehtarnavaz, "Real-time Continuous Action Detection and Recognition using Depth Images and Inertial Signals," *IEEE International Symposium on Industrial Electronics*, Edinburgh, United Kingdom, 2017.
- [C-8] M. Liu, **C. Chen**, and H. Liu, "Time-Ordered Spatial-Temporal Interest Points For Human Action Classification," *IEEE International Conference on Multimedia and Expo (ICME)*, Hong Kong, China, 2017.
- [C-9] M. Liu, **C. Chen**, and H. Liu, "3D Action Recognition Using Data Visualization and Convolutional Neural Networks," *IEEE International Conference on Multimedia and Expo (ICME)*, Hong Kong, China, 2017.
- [C-10] M. Liu, **C. Chen**, and H. Liu, "Learning Informative Pairwise Joints with Energy-based Temporal Pyramid for 3D Action Recognition," *IEEE International Conference on Multimedia and Expo (ICME)*, Hong Kong, China, 2017.

- [C-11] **C. Chen**, H. Hao, R. Jafari, and N. Kehtarnavaz, “Weighted fusion of depth and inertial data to improve view invariance for real-time human action recognition,” SPIE Conference on Real-Time Image and Video Processing, Anaheim, California, 2017.
- [C-12] M. Liu, H. Liu, **C. Chen**, and M. Najafian, “Energy-Based Global Ternary Image for Action Recognition Using Sole Depth Sequences,” International Conference on 3D Vision (3DV), Stanford, CA, 2016.
- [C-13] **C. Chen**, M. Liu, B. Zhang, J. Han, J. Jiang and H. Liu, “3D Action Recognition Using Multi-temporal Depth Motion Maps and Fisher Vector,” International Joint Conference on Artificial Intelligence (**IJCAI**), 2016. (Acceptance Rate: 24.0%=551/2294)
- [C-14] S. Liu, **C. Chen**, and N. Kehtarnavaz, “A Computationally Efficient Denoising and Hole-filling Method for Depth Image Enhancement,” SPIE Conference on Real-Time Image and Video Processing, Brussels, Belgium, 2016.
- [C-15] **C. Chen**, R. Jafari, and N. Kehtarnavaz, “Fusion of Depth, Skeleton, and Inertial Data for Human Action Recognition,” the 41st IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Shanghai, China, 2016.
- [C-16] J. Jiang, **C. Chen**, X. Song, and Z. Cai, “Hyperspectral Image Classification Using Set-to-Set Distance,” the 41st IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Shanghai, China, 2016.
- [C-17] J. Jiang, Z. Wang, **C. Chen**, and T. Lu, “L1-L1 Norms for Face Super-Resolution with Mixed Gaussian-Impulse Noise,” the 41st IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), Shanghai, China, 2016.
- [C-18] **C. Chen**, Z. Hou, B. Zhang, J. Jiang, and Y. Yang, “Gradient Local Auto-Correlations and Extreme Learning Machine for Depth-Based Activity Recognition,” 11th International Symposium on Visual Computing, Las Vegas, 2015.
- [C-19] **C. Chen**, J. Jiang, B. Zhang, W. Yang, and J. Guo, “Hyperspectral Image Classification Using Gradient Local Auto-Correlations,” IAPR Asian Conference on Pattern Recognition (ACPR), Kuala Lumpur, Malaysia, 2015.
- [C-20] **C. Chen**, R. Jafari, and N. Kehtarnavaz, “UTD-MHAD: A Multimodal Dataset for Human Action Recognition Utilizing a Depth Camera and a Wearable Inertial Sensor,” IEEE International Conference on Image Processing (ICIP), Quebec city, Canada, 2015.
- [C-21] **C. Chen**, L. Zhou, J. Guo, W. Li, H. Su, and F. Guo, “Gabor-Filtering-Based Completed Local Binary Patterns for Land-Use Scene Classification,” IEEE International Conference on Multimedia Big Data, Beijing, China, 2015.
- [C-22] **C. Chen**, R. Jafari, and N. Kehtarnavaz, “Action Recognition from Depth Sequences Using Depth Motion Maps-based Local Binary Patterns,” IEEE Winter Conference on Applications of Computer Vision (**WACV**), Waikoloa Beach, HI, 2015.
- [C-23] K. Liu, **C. Chen**, R. Jafari, and N. Kehtarnavaz, “Multi-HMM classification for hand gesture recognition using two differing modality sensors,” IEEE Dallas Circuits and Systems Conference, Richardson, TX, 2014.
- [C-24] **C. Chen**, K. Liu, R. Jafari, and N. Kehtarnavaz, “Home-based Senior Fitness Test Measurement System Using Collaborative Inertial and Depth Sensors,” International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Chicago, IL, 2014.
- [C-25] **C. Chen**, N. Kehtarnavaz, and R. Jafari, “A Medication Adherence Monitoring System for Pill Bottles Based on a Wearable Inertial Sensor,” International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Chicago, IL, 2014.
- [C-26] **C. Chen**, and J. E. Fowler, “Single-Image Super-Resolution Using Multihypothesis Prediction,” 46th Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, 2012.
- [C-27] **C. Chen**, E. W. Tramel, and J. E. Fowler, “Compressed-Sensing Recovery of Images and Video Using Multihypothesis Predictions,” 45th Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, 2011.

#### **PATENT**

- [P-1] N. Kehtarnavaz, R. Jafari, K. Liu, **C. Chen**, and J. Wu, “Fusion of inertial and depth sensors for movement measurements and recognition,” Publication number: US20160292497 A1; Application number: US 15/092,347; Publication date: Oct 6, 2016; Filing date: Apr 6, 2016; Priority date: Apr 6, 2015.
- [P-2] R. Jafari, N. Kehtarnavaz, and **C. Chen**, “Wearable medication adherence monitoring,” United States Patent Application 20160055316; Application Number: 14/834326; Publication Date: 02/25/2016; Filing Date: 08/24/2015.

## PRESENTATIONS

- “The Impact of Video Analytics for Pre, Live and Post Event Analysis,” **oral presentation**, *Annual International Association of Chiefs of Police (IACP) Technology Conference Workshop – Adding Computer Vision to Pre-existing Police Surveillance Camera Networks*, St. Louis, MO, May 23, 2017.
- “3D Action Recognition Using Multi-temporal Depth Motion Maps and Fisher Vector,” **oral presentation**, *The Twenty-Fifth International Joint Conference on Artificial Intelligence (IJCAI-16)*, New York City, NY, July 15, 2016.
- “Gradient Local Auto-Correlations and Extreme Learning Machine for Depth-Based Activity Recognition,” **oral presentation**, *International Symposium on Visual Computing (ISVC)*, Las Vegas, December 15, 2015.
- “Action Recognition from Depth Sequences Using Depth Motion Maps-based Local Binary Patterns,” **oral and poster presentations**, *IEEE Winter Conference on Applications of Computer Vision (WACV)*, Waikoloa Beach, HI, January 8, 2015.
- “Multi-HMM Classification for Hand Gesture Recognition Using Two Differing Modality Sensors,” **oral presentation**, *IEEE Dallas Circuits and Systems Conference (DCAS)*, Richardson, TX, October 13, 2014.

## INVITED TALKS

- October 20, 2017: “Large Scale Image Geo-localization Using Image Matching,” Data Science & Analytics Lab, American Family Insurance, Chicago, IL, USA.
- April 11, 2016: “Fusion of Depth and Inertial Sensing for Human Action Recognition,” Center for Remote Health Technologies and Systems, Texas A&M University, College Station, TX, USA.
- November 19, 2015: “Unsupervised Classification and Supervised Classification,” Department of Mathematical Sciences, University of Texas at Dallas, Richardson, TX, USA.
- February 05, 2015: “Noise Robust Hyperspectral Image Classification,” Spectral MD, Inc., Dallas, Texas, USA.

## PROFESSIONAL AFFILIATIONS & ACTIVITIES

### Professional Society Memberships

- Member, IEEE 2016 – Present
- Student Member, IEEE 2010 – 2016

### Journal Editorships

- Associated Editor, KSII Transactions on Internet and Information Systems (IF = 0.452) 2016 – Present
- Associated Editor, Signal, Image and Video Processing (Springer) (IF = 1.102) 2016 – Present
- Lead Guest Editor, “Sensors Signal Processing and Visual Computing”, Special Issue of Sensors (IF = 2.677) in process

Link: [http://www.mdpi.com/journal/sensors/special\\_issues/signal\\_visual#editors](http://www.mdpi.com/journal/sensors/special_issues/signal_visual#editors)

- Lead Guest Editor, “Advances in Real-Time Image Processing for Remote Sensing”, Special Issue of Journal of Real-Time Image Processing (IF = 2.010) in process

Link: <http://static.springer.com/sgw/documents/1614196/application/pdf/JRTIP-SI-CFP-final+August.pdf>

### Conference Technical Program Committee Member

- 2015 International Conference on Intelligent Computing (ICIC 2015)
- 2016 International Conference on Intelligent Computing (ICIC 2016)
- 2017 International Conference on Intelligent Computing (ICIC 2017)
- 2016 Asian Conference on Machine Learning (ACML) Workshop on Learning on Big Data

**Journal Reviewer (performed a total of 438 journal reviews verified by Publons, as of 01/08/2018)**

- IEEE Transactions on Image Processing
- IEEE Transactions on Multimedia
- IEEE Transactions on Circuits and Systems for Video Technology
- IEEE Transactions on Human-Machine Systems
- IEEE Transactions on Geoscience and Remote Sensing
- IEEE Transactions on Computational Imaging
- IEEE Signal Processing Letters
- IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
- IEEE Geoscience and Remote Sensing Letters
- IEEE Journal of Biomedical and Health Informatics
- IEEE Sensors Journal
- Proceedings of the IEEE
- Signal, Image and Video Processing
- Multimedia Tools and Applications
- Neural Computing and Applications
- Memetic Computing
- Sensors, MDPI
- Remote Sensing, MDPI
- European Journal of Remote Sensing
- Mathematical Problems in Engineering
- Journal of Electronic Imaging
- Journal of Medical Imaging
- Journal of Applied Remote Sensing
- Journal of Real-Time Image Processing
- Journal of Biomedical Optics
- International Journal of Remote Sensing and Remote Sensing Letters
- International Journal of Electronics and Communications
- Image and Vision Computing, Elsevier
- Journal of Visual Communication and Image Representation, Elsevier
- Neurocomputing, Elsevier
- Pattern Recognition Letters, Elsevier
- Science of the Total Environment, Elsevier
- The Visual Computer
- Frontiers of Earth Science

#### **Conference Reviewer**

- 2013 IEEE International Conference on Image Processing (ICIP 2013)
- 2014 IEEE International Conference on Image Processing (ICIP 2014)
- 2015 IEEE International Conference on Image Processing (ICIP 2015)
- 2016 IEEE International Conference on Image Processing (ICIP 2016)
- 2017 IEEE International Conference on Image Processing (ICIP 2017)
- 2015 IEEE Winter Conference on Applications of Computer Vision (WACV 2015)
- 2016 IEEE Winter Conference on Applications of Computer Vision (WACV 2016)
- 2017 IEEE Winter Conference on Applications of Computer Vision (WACV 2017)
- 2018 IEEE Winter Conference on Applications of Computer Vision (WACV 2018)
- 2015 IEEE International Conference on Multimedia Big Data, 2015 (BigMM 2015)
- 2017 International Conference on Computer Vision (ICCV 2017)
- 2017 IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2017)
- 2018 IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2018)

#### **REFERENCES**

- **Professor Mubarak Shah**  
Fellow of IEEE, AAAS, IAPR and SPIE  
Trustee Chair Professor of Computer Science  
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- **Professor Nasser Kehtarnavaz**  
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Center for Remote Health Technologies and Systems  
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- **Professor James E. Fowler**  
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