

Dr. Zhu Li

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University of Missouri – Kansas City
Director, NSF I/UCRC Center for Big Learning at UMKC
Associate Editor-in-Chief, *IEEE Trans on Circuits & System for Video Technology*, 2020-23
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Education:

- Doctor of Philosophy in Electrical & Computer Engineering (2004), **Northwestern University**, Evanston, Illinois 60208, USA
- Master of Science in Computer Science (1997), **University of Louisiana, Lafayette**, Louisiana 70504, USA
- Bachelor of Science in Computer Science (1992), **Sichuan University**, Chengdu, China

Appointments:

- *Professor* (2022), *Associate Professor with Tenure* (2019), *Associate Professor* (2015), **University of Missouri, Kansas City**, 2015-to date
- *AFRL Summer Faculty*, UAV Research Center, **US Air Force Academy**, 2016-18, 2020, 2022-24
- *Summer Faculty* (1/2 time), **Air Force Research Lab**, Sensor Directorate, Dayton Ohio, 2021.
- *Senior Staff Researcher/Sr. Manager*, Multimedia Standards Lab, **Samsung Research America**, Richardson, TX, USA, 2012-2015
- *Senior Staff Researcher*, Media Lab, **FutureWei Technology**, Bridgewater, NJ, USA, 2010-2012
- *Assistant Professor*, Dept of Computing, **The Hong Kong Polytechnic University**, 2008-2010
- *Principal Staff Research Engineer*, Multimedia Research Lab, **Motorola Labs**, Schaumburg, IL, USA, 2000-2008

Research Interests

- *Remote Sensing, Imaging & Vision*: AI enabled Image Processing and machine learning for remote sensing and computer vision problems, hyper-spectral imaging, Synthetic Aperture Radar (SAR) imaging and processing, lensless cameras, event camera based vision, mmWave radar for action recognition, point cloud/LiDAR sensing and vision problems.
- *Signal & Data Compression*: Compression of image and videos, 3D volumetric data coding, light field, point cloud compression, 360 immersive video compression and communication systems; End-to-end deep learning based compression for point cloud and complex synthetic aperture radar images; compression for machine vision; Lossless compression of DNA sequence.
- *Embedded Machine Learning*: Machine learning for image recovery from noisy and blurred measurement, deblocking, deblurring, cross modality image translation, low light and low resolution vision problems. Machine learning system optimization and security, model compression, gradient compression for federated learning, security in deep learning framework. Edge and mobile inference engine optimization, large model compression and acceleration.

Awards

- N.T. VEATCH Award for Distinguished Research & Creativity, Trustees of University of Missouri, Kansas City, 2025.
- Air Force Research Lab (AFRL) Summer Faculty Fellowship, 2016, 2017, 2018, 2020, 2022, 2023, 2024.
- AFRL Summer Fellowship (1/2 FTE), AFRL Sensor Directorate, Dayton, OH, 2021.
- Best Paper Runner-up: IEEE CVPR Perception Beyond Visual Spectrum (PBVS) Challenge on

SAR/EO Image Recognition

- Best Paper Award, IEEE Int'l Conference on Image Processing (ICIP), 2007.
- Best Paper Award, IEEE Int'l Conference on Multimedia & Expo (ICME), 2006.

Teaching

- **ECE/CS 484 Digital Image Processing:** fundamental of signal/image processing, image formation process, filters, Fourier transforms, 2D Fourier transforms, DCT, graph signal processing, bilateral filters, neural networks in image processing, auto-encoder, variational auto-encoder.
- **ECE/CS 5578 Multimedia Communication:** fundamental of image/video coding and communication systems, covering info theory on entropy, entropy coding, transform and prediction based image/video coding, rate-distortion optimization, learning based compression, deep learning for prediction and deblocking, MPEG system, MP4 file format, DASH for video streaming, source-channel coding. Course web page: <http://sites.google.com/view/ece5578>
- **ECE/CS 5582 Computer Vision:** fundamental of image processing and computer vision, covering image formation geometry constraints, homography estimation, color space and demosaicing, filters and gradients, Harris detector and SIFT, subspace methods including Fisherface and Laplacianface, subspace optimization on Grassmann manifold, deep conv neural networks in vision, transfer learning. Course web page: <http://sites.google.com/view/ece5582>

PhD and Post-Doc Supervising

Currently team: 8 PhD and 1 Post-Doc

- 1 of my PhD Students Received the UMKC School of Graduate Studies (SGS) Research Grant Award.
- 1 of my MS student nominated for UMKC outstanding MS thesis award 2017
- my PhD students received internships from leading tech companies: Qualcomm, HERE, Tencent Media Lab, INTEL, PolyCom, Dolby Lab, SONY, FutureWei Media Lab, Thales.
- 2 of my MS students got intern at AFRL Dayton Lab

Supervised Post-Docs:

- Dr. Li Li, 2016.10-2020.09, now Full Professor with Univ of Science & Tech of China (USTC). ICME 2023 Multimedia Rising Star.
- Dr. Renlong Hang, 2018.09-2019.12, now Associate Professor with Nanjing Univ of Info Science & Tech (NUIST). Top 2% researcher in citation in remote sensing area.

Graduated PhD student:

- Dr. Biren Kathariya, 2024, initial job: Senior Research Engineer, Dolby Lab.
- Dr. Rijun Liao, 2024, initial job: Asst Prof, Guangdong Medical University.
- Dr. Yangfan Sun, 2023, initial job: Amazon Research, Shenzhen.
- Dr. Anique Akhtar, 2022, initial job: Qualcomm Video Codec researcher.
- Dr. Zhaobin Zhang, 2019 (initial employment: Researcher at ByteDance, San Diego)
- Dr. Dewan F. Noor, 2019 (initial employment: Asst Prof, Tuskegee University)
- Dr. Wei Jia, 2021, (initial employment: Researcher at Kwai's Video Codec Group, San Diego)

Supervised visiting PhD Students:

- Yue Li, USTC, 2017-18, now with ByteDance, San Diego
- Wenjie Zhu, Shanghai Jiaotong Univ, 2017~18, now with Tencent Shanghai Lab
- Han Zhang, Shanghai Jiaotong Univ, 2018~19, now with Tencent Shanghai Lab
- Yixin Mei, Xian Jiaotong Univ, 2019-20, now with Huawei Tech, China.

Professional and Synergistic Activities

Associate Editor-in-Chief (2020~2023): IEEE Transactions on Circuits & System for Video Technology (T-CSVT)

Senior Area Editor (2024~): IEEE Transactions on Circuits & System for Video Technology (T-CSVT)

Associate Editor (2019-): IEEE Trans on Image Processing (T-IP)

Associate Editor (2015 - 2018): IEEE Transactions on Multimedia (T-MM)

Associate Editor (2016 - 2019, 2024~): IEEE Transactions on Circuits & System for Video Technology (T-CSVT)

Associate Editor (2020-): Frontier in Signal Processing - Image Communication.

Associate Editor (2015 - 2018): Journal of Signal Processing Systems (JSPS), Springer Publication

Guest Editor:

- IEEE Journal on Selected Areas in Communication (J-SAC), special issue on Economics & Optimization in Networks, 2018.
- IEEE Trans on Circuits & System for Video Tech, special issue on Point Cloud Processing & Compression, 2020.

Elected Technical Committee Member:

- IEEE Multimedia Signal Processing Technical Committee (MMSP-TC): 2015-2019, 2023~
- IEEE Image, Video and Multidimensional Signal Processing (IVMSP) Technical Committee: 2018-current
- IEEE Multimedia Communication Technical Committee (MMTC): Vice Chair Asia (2008-2010), Standards Liaison (2015-2016), Steering Chair (2017-2019).
- IEEE Visual Signal Processing and Communication Technical Committee (VSPC-TC) : 2017-current, Secretary (2022-24), Chair (2024-26).
- IEEE Multimedia System and Applications Technical Committee (MSA-TC): 2016-2019.

Steering Committee:

- IEEE Int'l Conference on Multimedia & Expo (ICME), 2018-2019, representing SPS, 2016-2017 representing ComSoc.
- IEEE Int'l Conference on Visual Communication & Image Processing (VCIP), 2018-2020.

Conference Chair:

- General Co-Chair, IEEE Multimedia Signal Processing Workshop (MMSP), West Lafayette, Indiana, USA, 2024.
- Program Co-Chair, IEEE Multimedia Signal Processing Workshop (MMSP), Poitiers, France, 2023.
- General Co-Chair, IEEE Int'l Conf on Multimedia & Expo (ICME), Brisbane, Australia, 2023.
- Program Chair (Lead): *IEEE Visual Communication & Image Processing (VCIP)*, Suzhou, China, 2022
- Elected TPC Co-Chair, representing IEEE SPS, *IEEE Int'l Conf on Multimedia & Expo (ICME)*, 2019.
- General Chair, *IEEE Visual Communication & Image Processing (VCIP)*, St. Petersburg, FL, USA, 2017.
- TPC Co-Chair, The 7th Annual IEEE Consumer Communications and Networking Conference (CCNC), Las Vegas, USA, 2009.

Symposium Chair:

- IEEE Global Communications Conference: Communications Software, Services and Multimedia Apps Symposium, 2017.
- ITC 28, 2016.
- IEEE International Conf on Communication (ICC) - Multimedia Services, Communication Software and Services Symposium, 2010.

Tutorials:

- Point cloud processing and compression with sparse convolutional engine, given at IEEE Int'l Conf on Image Processing (ICIP), Boredeaux, France, 2022.

Funding Agency Services:

- NSF Panel, 2018, 2021, 2022
- NSF workshop on Future of the networked AR/VR, 2018.
- Invited CAREER Award reviewer, 2018.
- AFOSR YIP Award reviewer, 2018.
- Reviewer for Swiss NSF, 2021
- RGC Panelist for Hong Kong Research Grant Council, 2022, 2023

Best Paper Awards Committees:

- IEEE International Conf on Multimedia & Expo, 2010.
- IEEE Trans on Circuits & System for Video Tech (T-CSVT), 2020, 2021, 2022, 2023.

Area Chair:

- IEEE International Conf on Image Processing (ICIP), 2015, 2016, 2017, 2018, 2019, 2020, 2021.
- IEEE International Conf on Multimedia & Expo (ICME), 2015, 2016, 2017, 2018, 2021.
- IEEE International Conf on Audio, Speech & Signal Processing (ICASSP), 2020, 2021
- IEEE Visual Communication and Image Processing (VCIP) Conf, 2020, 2021
- ACM Multimedia (MM), 2017, 2018.
- ACM Multimedia Systems (MMSys), 2018.
- 28th International Teletraffic Congress (ITC), 2016.

Program Committee Member:

1. IEEE Int'l Symposium on Multimedia (ISM), Irvine, California, 2005, 2006
2. IEEE GLOBECOM, 2006, 2007, 2008, 2010, 2011, 2012, 2013, 2014.
3. IEEE Int'l Conference on Communication (ICC), 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015.
4. PacketVideo Workshop, 2006, 2009, 2010, 2012, 2013.
5. IEEE Int'l Conference on Multimedia and Expo (ICME), 2006, 2007, 2008, 2010, 2013, 2014.
6. IEEE Consumer Communications and Networking Conference (CCNC), 2007, 2008.
7. IEEE Wireless Communication & Networking Conference (WCNC), 2013, 2014.
8. Pacific Conference on Multimedia (PCM), 2007, 2009.
9. IEEE Multimedia Signal Processing (MMSP) workshop, 2006, 2007, 2008, 2011.
10. IEEE Embedded Computer Vision Workshop, in conjunction with ICCV, 2009, 2013.
11. IEEE Workshop on Video-oriented Object and Event Classification, in conjunction with ICCV, 2009, 2010, 2011.
12. 6th IEEE Int'l Conf on Advanced Video and Signal Based Surveillance (AVSS), Genoa, Italy, 2009.

Conference Session Chair: Chaired more than twenty (20) Sessions in Various IEEE and ACM Conferences

Professional Membership: IEEE Senior Member since 2007, nominated for IEEE Fellow by CASS, 2023.

Publications

Book Chapters:

1. L. Li and **Z. Li**, "Light Field and Plenoptic Point Cloud Compression", Springer: *Handbook for Dynamic Data Driven Applications Systems*, Ed. Erik Blasch, 2021.
2. L. Li and **Z. Li**, "Light Field Image Compression", Springer: *Dynamic Data Driven Applications Systems*, Ed. Erik Blasch, 2018.

3. Z. Zheng, **Z. Li**, and A. Nagar, "Compact Deep Neural Networks for Image Understanding on Mobile Devices", Springer: *Mobile and Cloud Visual Media Computing*, Ed. G. Hua, and X. Hua, 2016.
4. H. Zheng, **Z. Li**, Y. Fu, and A. Katsaggelos, "Video Activity Recognition by Luminance Differential Trajectory and Aligned Projection Distance", *Handbook of Statistics*, Ed. V. Govindaraju et. al. Elsevier, 2013.
5. Y. Li, **Z. Li**, J. Huang, and M. Chiang, "Content-Aware Cross-Layer Optimizations in Video Networking", chapter in *Intelligent Multimedia Communication: Techniques and Applications*, Springer-Verlag, Ed. C.-W Chen, Z. Li, and S. Lian, 2010.
6. **Z. Li**, Y. Fu, J. Yuan, Y. Wu, A. K. Katsaggelos and T. S. Huang, "Multimedia Data Indexing", book chapter in *Semantic Mining Technologies for Multimedia Databases*, Ed. D. Tao, D. Xu, and X. Li, IGI Publishing, 2009.
7. **Z. Li**, A. K. Katsaggelos, and G. M. Schuster, "Rate-Distortion Optimal Video Summarization", book chapter in *Intelligent Multimedia Processing with Soft Computing*, pp. 171-204, editors: Y.P. Tan, K. H. Yap, and L. Wang, Springer-Verlag, Heidelberg, 2004.

Journal Papers: (underlined authors indicate supervised students/post-doc/visiting faculties)

1. K. Yang, Q. Yang, Y.-L. Xu, and **Z. Li**, "Textured Mesh Quality Assessment Using Geometry and Color Field Similarity", *IEEE Trans on Visualization & Computer Graphics*, (T-VCG), 2025.
2. Y. Liu, Q. Yang, Y. Zhang, Y. Xu, L. Yang and **Z. Li**, "From Images to Point Clouds: An Efficient Solution for Cross-media Blind Quality Assessment without Annotated Training," in *IEEE Trans. on Circuits and Sys. for Video Tech* (T-CSVT: IF 8.4), 2025.
3. W. Wu, W. Zhai, Y. Liu, X. Hu, T. Yang, and **Z. Li**, "Three-domain joint deraining network for video rain streak removal", *Signal Process. Image Comm.*, vol.139:117400, 2025.
4. D. Xue, S.Wu, L. Li, D.Liu, and **Z. Li**, "Multi-Source Domain Generalization for Learned Lossless Volumetric Biomedical Image Compression", to appear, *IEEE Trans on Image Processing*, (T-IP: IF 10.6), 2025.
5. E. Lee, L. Pan, **Z. Li** and S. S. Bhattacharyya, "Efficient Hyperspectral Image Classification using Discrete Cosine Transform on Limited-Resource Systems" *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* (JSTARS), 2025.
6. W. Wu, X. Hao, X. Luo, and **Z. Li**, "Attention++ Network for Lightweight Image Super-Resolution", *IEEE Signal Processing Letters* (SPL), 2025.
7. L. Hou, T. Fan, Y. Xu and **Z. Li**, "Lossless LiDAR Point Cloud Reflectance Compression with a Deep Hierarchical KNN Context Model," in *IEEE Transactions on Multimedia*, (T-MM), 2025.
8. Y. Jiang, H. Zhang, L. Li, D. Liu and **Z. Li**, "Sparse Point Clouds Assisted Learned Image Compression", to appear, *IEEE Trans. on Circuits & System for Video Tech* (T-CSVT), 2025.
9. W.Wu, X. Hu, X. Luo, Z. Li, "FishermaskFormer: Lightweight Remote Sensing Scene Classification with Masked Transformer", *IEEE Jnl of Selected Topics in Applied Earth Observ. and Remote Sensing* (J-STAR), 2025.
10. J. Li, Z. Zhao, Q. Li, Z. Li, P. Zhou, Z. Liu and **Z. Li**, "VPFormer: Leveraging Transformer with Voxel Integration for Viewport Prediction in Volumetric Video", *ACM Trans on Multimedia Computing, Communication and Applications* (TOMM: IF 5.1), 2025.
11. L. Hou, T. Fan, Y. Xu and **Z. Li**, "Lossless LiDAR Point Cloud Reflectance Compression with a Deep Hierarchical KNN Context Model," to appear, *IEEE Transactions on Multimedia*, (T-MM), 2025.
12. Y. Jiang, H. Zhang, L. Li, D. Liu and **Z. Li**, "Sparse Point Clouds Assisted Learned Image Compression", to appear, *IEEE Trans. on Circuits & System for Video Tech* (T-CSVT: IF 8.4), 2025.
13. L. Hou, T. Fan, Y. Xu and **Z. Li**, "Lossless LiDAR Point Cloud Reflectance Compression with a Deep Hierarchical KNN Context Model," in *IEEE Transactions on Multimedia* (T-MM), 2025.
14. P. Chen, S. Wang, and **Z. Li**, "Occupancy Map Guided Attributes Artifacts Removal for Video-based Point Cloud Compression", *ACM Trans on Multimedia Computing, Communication and Applications* (TOMM: IF 5.1), 2024.
15. R. Liao, **Z. Li**, S. Battachayya, and G. York, "DensePoseGait: Dense Human Pose Part-Guided for Gait Recognition", to appear, *IEEE Trans. on Biometrics, Behavior, and Identity Science* (T-BIOM), 2024.
16. C. Henry, L. Song, and **Z. Li**, "Fast Video Deduplication and Localization with Temporal Consistence Re-Ranking", to appear, *IEEE Trans. on Circuits & System for Video Tech* (T-CSVT: IF 8.4), 2024.
17. W. Wu, H. Chang, Z. Chen, and **Z. Li**, "Plug-and-Play Robust Aerial Object Detection under Hazy Conditions" *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* (J-STARS: IF 5.5), 2024.
18. Y. Zhang, D. Ding, Z. Ma, and **Z. Li**, "A Reconfigurable Framework for Neural Network Based Video In-Loop

- Filtering", *ACM Trans on Multimedia Computing, Comm, & App* (TOMM: IF 5.1), vol. 20(6), 2024.
19. W. Wu, H. Chang and **Z. Li**, "See SIFT in a Rain," in *IEEE Trans on Circuits and Systems for Video Tech* (T-CSVT: IF 8.4), vol. 34, no. 5, pp. 3700-3713, May 2024.
 20. C. Henry, S. Asif, and **Z. Li**, "Privacy Preserving Face Recognition and Verification with Lensless Camera", to appear, *IEEE Trans on Biometrics, Behaviour, and Identify Science* (T-BIOM), 2024.
 21. L. Gao, **Z. Li**, L. Hou, Y. Xu and J. Sun, "Occupancy-Assisted Attribute Artifact Reduction for Video-Based Point Cloud Compression," in *IEEE Transactions on Broadcasting*, 2024, doi: 10.1109/TBC.2024.3353568
 22. **A. Akhtar**, **Z. Li**, and G. Van der Auwera, "Inter-Frame Compression for Dynamic Point Cloud Geometry Coding", to appear, *IEEE Transactions on Image Processing*.(T-IP: IF 10.6), 2024.
 23. L.Gao, **Z. Li**, L. Hou, Y.-L. Xu, and J. Sun, "Occupancy-Assisted Attribute Artifact Reduction for Video-Based Point Cloud Compression", *IEEE Trans. Broadcast.* 70(2): 667-680 (2024)
 24. T. Hassan, **Z. Li**, S. Javed, J. Dias and N. Werghi, "Neural Graph Refinement for Robust Recognition of Nuclei Communities in Histopathological Landscape," in *IEEE Transactions on Image Processing*.(T-IP: IF 10.6) , vol. 33, pp. 241-256, 2024, doi: 10.1109/TIP.2023.3337666.
 25. **B. Kathriya**, **Z. Li** and G. van der Auwera, "Joint Pixel and Frequency Feature Learning and Fusion via Channel-wise Transformer for High-Efficiency Learned In-Loop Filter in VVC", accepted, *IEEE Trans. on Circuits & Sys. for Video Tech*.(T-CSVT: IF 8.4), 2023
 26. T. Fan, L. Gao, Y. Xu, D. Wang and **Z. Li**, "Multiscale Latent-Guided Entropy Model for LiDAR Point Cloud Compression," in *IEEE Trans. on Circuits and Sys. for Video Tech* (T-CSVT: IF 8.4), vol. 33, no. 12, pp. 7857-7869, Dec. 2023, doi: 10.1109/TCSVT.2023.3276788
 27. **W. Wu**, Y. Liu and **Z. Li**, "Subband Differentiated Learning Network for Rain Streak Removal," in *IEEE Transactions on Circuits and Systems for Video Technology*, .(T-CSVT: IF 8.4) , 2023.
 28. Y. Zhang, G. Ding, D. Ding, Z. Ma and **Z. Li**, "On Content-aware Post-processing: Adapting Statistically Learned Models to Dynamic Content", in *ACM Trans on Multimedia Computing, Communication and Applications* (TOMM: IF 5.1), 2023.
 29. J. Wang, D. Ding, **Z. Li**, X. Feng, C. Cao and Z. Ma, "Sparse Tensor-based Multiscale Representation for Point Cloud Geometry Compression", accepted, *IEEE Trans. on Pattern Analysis & Machine Intelligence* (T-PAMI: IF 23.6), 2023.
 30. **R. Liao**, **Z. Li**, S. Bhattacharyya, and G. York, "PoseMapGait: A Gait Recognition Method based on Evolution of Pose Estimation Maps and GraphConvolutional Network", accepted, *Neurocomputing* (IF 5.77), 2022.
 31. **L. Li**, **Z. Li**, S. Liu, and H. Li, "Frame-level Rate Control for Geometry-based LiDAR Point Cloud Compression", accepted, *IEEE Trans. on Multimedia* (T-MM: IF 7.3), 2022.
 32. **Y. Sun**, **L. Li**, **Z. Li**, S. Wang, S. Liu and G. Li, "Learning a Compact Spatial-Angular Representation for Light Field", *IEEE Trans. on Multimedia* (T-MM: IF 7.3), 2022.
 33. **A. Akhtar**, **Z. Li**, L. Li, G. Auwera, and J. Chen, "PU-Dense: Large Scale Photo-Realistic Point Cloud Upsampling", accepted with *IEEE Trans on Image Processing* (T-IP: IF 10.6), 2022.
 34. **Y. Sun**, **Z. Li**, S. Wang, and W. Gao, "Learning-based Depth-Guided Light Field Factorization for Compressive Light Field Display", *Optical Express*, 2022.
 35. **Z. Li**, S. Liu, F. Dufaux, L. Li, G. Li and C. . -C. J. Kuo, "Guest Editorial Introduction to the Special Issue on Recent Advances in Point Cloud Processing and Compression," in *IEEE Transactions on Circuits and Systems for Video Technology*(T-CSVT: IF 8.4), vol. 31, no. 12, 2021, doi: 10.1109/TCSVT.2021.3129071.
 36. D. Yang, Y.-X. Zou, **Z. Li**, and G. Li, "Learning Human-Object Interaction via Interactive Semantic Reasoning", *IEEE Trans on Image Processing* (T-IP: IF 10.6), doi: 10.1109/TIP.2021.3125258, 2021.
 37. **L. Li**, **Z. Li**, S. Liu and H. Li, "Motion Estimation and Coding Structure for Inter-prediction of LiDAR Point Cloud Geometry", accepted, *IEEE Trans on Multimedia* (T-MM: IF 7.3), 2021.
 38. **Y. Mei**, **L. Li**, **Z. Li**, and F. Li, "Learning-Based Scalable Image Compression with Latent-Feature Reuse and Prediction", accepted, *IEEE Trans on Multimedia* (T-MM: IF 7.3), 2021.
 39. **R. Hang**, Q. Liu, and **Z. Li**, "Spectral Super-Resolution Network Guided by Intrinsic Properties of Hyperspectral Imagery", *IEEE Trans on Image Processing*(T-IP: IF 10.6) doi:10.1109/TIP.2021.3104177, 2021.
 40. **W. Jia**, **L. Li**, **Z. Li**, and S. Liu, "Deep Learning Geometry Compression Artifacts Revomal for Video Based Point Cloud Compression", accepted with *Int'l Journal on Computer Vision* (IJCV: IF 13.36), 2021.
 41. **A. Akhtar**, **L. Li**, W. Gao, **Z. Li**, **W. Jia** and S. Liu, "Video-based Point Cloud Compression Artifact Removal", accepted, *IEEE Trans on Multimedia* (T-MM: IF 7.3), 2021.
 42. X. Sheng, L. Li, D. Liu, Z. Xiong, **Z. Li**, and F. Wu, "Deep-PCAC: An End-to-End Deep Lossy Compression Framework for Point Cloud Attributes", accepted, *IEEE Trans on Multimedia* (T-MM: IF 7.3), 2021.

43. W. Jia, L. Li, Z. Li and S. Liu, "Convolutional Neural Network-based Occupancy Map Accuracy Improvement for Video-based Point Cloud Compression", accepted, *IEEE Trans on Multimedia* (T-MM: IF 7.3), 2021.
44. R. Liao, W. An, Z. Li, and S. S. Bhattacharyya, "A novel view synthesis approach based on view spacecovering for Gait Recognition", accepted, *Neurocomputing*, 2021.
45. W. Ji, T. Ebrahimi, Z. Li, J. Yuan, D. Wu, Y. Xin, "Guest Editorial: Emerging Visual IoT Technologies for Future Communications and Networks", *IEEE Wireless Comm.*, vol. 28(4): 10-11 (2021).
46. W. Jia, L. Li, Z. Li, X. Zhang and S. Liu, "Residual Guided In-Loop Filter for HEVC", accepted, *ACM Trans on Multimedia Computing, Communication and Applications*(TOMM: IF 5.1), 2021.
47. T. Li, K. Zhang, S. Shen, B. Liu, Q. Liu, and Z. Li, "Image Co-saliency Detection and Instance Co-segmentation using Attention Graph Clustering based Graph Convolutional Network", accepted, *IEEE Trans on Multimedia* (T-MM: IF 7.3), 2021.
48. Q. Yang, Z. Ma, Y. Xu, Z. Li, and J. Sun, "Inferring Point Cloud Quality via Graph Similarity", to appear, *IEEE Trans on Pattern Analysis & Machine Intelligence*, (T-PAMI: IF 23.6), 2020.
49. Y. Li, Y. Yi, D. Liu, L. Li, Z. Li, and H. Li, "Neural Network Based Cross-Channel Intra Prediction", *ACM Trans on Multimedia Computing Communication and Applications* (TOMM: IF 5.1), 2020.
50. W. Jia, L. Li, Z. Li, S. Zhao and S. Liu, Scalable Hash From Triplet Loss Feature Aggregation for Video De-Duplication, *Journal of Visual Communication & Image Representation* (JVCIR), 2020.
51. L. Li, Z. Li, S. Liu, H. Li, "Efficient Projected Frame Padding for Video-based Point Cloud Compression", accepted, *IEEE Transactions on Multimedia*,(T-MM: IF 7.3) 2020.
52. L. Li, Z. Li, S. Liu, H. Li, "Rate Control for Video-based Point Cloud Compression", accepted with *IEEE Transactions on Image Processing* (T-IP: IF 10.6), 2020.
53. H. Zhang, L. Song, L. Li, Z. Li, and X.K. Yang, "Compression Priors Assisted Convolutional Neural Network for Fractional Interpolation", to appear, *IEEE Transactions on Circuits and Systems for Video Technology*.(T-CSVT: IF 8.4)
54. R. Hang, Z. Li, Q. Liu, P. Ghamisi and S. Bhattacharyya, "Hyperspectral Image Classification with Attention Aided CNNs", to appear, *IEEE Trans. on Geoscience & Remote Sensing* (T-GRS: IF 8.2), 2020.
55. W. Zhu, Z. Ma, Y. Xu, L. Li, and Z. Li, "View-Dependent Dynamic Point Cloud Compression", *IEEE Transactions on Circuits and Systems for Video Technology* (T-CSVT: IF 8.4), 2020.
56. Z. Zhang, X. Zhao, X. Li, L. Li, S. Liu, and Z. Li "Fast DST-7/DCT-8 with Dual ImplementationSupport for Versatile Video Coding",accepted, *IEEE Trans on Circuits & Sys. for Video Tech* (T-CSVT: IF 8.4), 2020.
57. R. Hang, Z. Li, P. Ghamisi, D. Hong, G. Xia and Q. Liu, "Classification of Hyperspectral and LiDAR Data Using Coupled CNNs," in *IEEE Transactions on Geoscience and Remote Sensing*, (T-GRS: IF 8.2), vol. 58, no. 7, pp. 4939-4950, July 2020, doi: 10.1109/TGRS.2020.2969024.
58. Li Li, N. Yan, Z. Li, S. Liu, H. Li, " λ -domain Perceptual Rate Control for 360-degree Video Compression", accepted with *IEEE Journal of Selected Topics in Signal Processing*, (JSTSP: IF 7.69) 2020.
59. L. Li, Z. Li, S. Liu, H. Li, "Occupancy-map-based Rate Distortion Optimization and Partition for Video-based Point Cloud Compression", accepted, *IEEE Transactions on Circuits and Systems for Video Technology*, (T-CSVT: IF 8.4), 2019.
60. L. Li, Z. Li, V. Zakharchenko, J. Chen, and H. Li, "Advanced 3D Motion Prediction for Video Based Dynamci Point Cloud Compression", accepted, *IEEE Trans on Image Processing*, (T-IP: IF 10.6) 2019.
61. D. F. Dewan, Y. Li, Z. Li, S. Bhattacharyya, and G. York, "Multi-Scale Gradient Image Super-Resolution for Preserving SIFT Key Points in Low-Resolution Images", special issue on deep learning in super resolution, *Signal Processing: Image Communication*, 2019.
62. W. Ji, Z. Li, H.V. Poor, W. Zhu, and C. Timmerer, "Guest Editorial: Multimedia Economics for Future Networks:Theory, Methods, and Applications", *IEEE Journal on Selected Areas in Communication*, (J-SAC: IF 16.4),2019.
63. S. Schwarz, M. Preda, V. Baroncini, M. Budagavi, P. César, P. A. Chou, R. A. Cohen, M. Krivokuca, S. Lasserre, Z. Li, J. Llach, K. Mammou, R. Mekuria, O. Nakagami, E. Siahaan, A. J. Tabatabai, A. M. Tourapis, V. Zakharchenko: Emerging MPEG Standards for Point Cloud Compression. *IEEE J. Emerg. Sel. Topics Circuits Syst.* (JETCAS: IF 4.6) vol. 9(1): 133-148 (2019).
64. Li Li, Z. Li, Bin Li, Dong Liu, Houqiang Li, "Quadtree-based Coding Framework for High Density Camera Array based Light Field Image", in *IEEE Transactions on Circuits and Systems for Video Technology*, (T-CSVT: IF 8.4) 2019
65. Y. Li, L. Li, D. Liu, H. Li, Z. Li, and F. Wu, "Learning a Convolutional Neural Network for Image Compact-Resolution", *IEEE Trans on Image Processing*, (T-IP: IF 10.6), 2018.

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2. H. Huang, Q. Yang, M. Liu, Y. Xu, **Z. Li**, "ADC-GS: Anchor-Driven Deformable and Compressed Gaussian Splatting for Dynamic Scene Reconstruction", *Int'l Joint Conf on Artificial Intelligence (IJCAI)*, Montreal, Canada, 2025.
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