CURRICULUM VITAE

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EDUCATIONAL BACKGROUND

- Ph.D. in Electrical Engineering, University of Texas at Dallas, TX, 2016

- M.S. in Electrical Engineering, Mississippi State University, MS, 2012

- B.S. in Automation, Beijing Forestry University, China, 2009

EMPLOYMENT HISTORY

- Associate Professor at the Center for Research in Computer Vision & Department of Computer Science, University of Central Florida, August 2024 – Present

- Assistant Professor at the Center for Research in Computer Vision & Department of Computer Science, University of Central Florida, July 2021 – August 2024

- Assistant Professor at the Department of Electrical and Computer Engineering at University of North Carolina at Charlotte, August 2018 – June 2021

- Postdoc Research Associate at the Center for Research in Computer Vision at University of Central Florida, July 2016 – June 2018

- Research Assistant at the Embedded Machine Learning (EML) Laboratory at University of Texas at Dallas, August 2012 – June 2016

- Research and Teaching Assistant at the Department of Electrical and Computer Engineering at Mississippi State University, August 2009 – May 2012

HONORS AND AWARDS

- University of Texas at Dallas Graduate Research Travel Award, 2015
- David Daniel Fellowship Award (Best Doctoral Dissertation Award), University of Texas at Dallas, 2016

- ACM Multimedia Travel Grant, 2019
- UNC-Charlotte Faculty Research Award, 2019
- CVPR 2022 Best Paper Finalists, 2022
- World's top 2% scientists" by Stanford University/ Elsevier
- Finalist for the MICCAI 2023 Young Scientist Publication Impact Award, 2023 [Recognition letter]
- The Academy of Science, Engineering and Medicine of Florida (ASEMFL) Rising Stars Award, 2024 [Citation for award] [News report]

RESEARCH AND CREATIVE ACTIVITY

o **Publication (Supervised students at UCF are marked with an asterisk (*))**

Google Scholar profile (**h-index: 70, citations: 21411**, as of 11/20/2024)
https://scholar.google.com/citations?hl=en&user=TuEwcZ0AAAAJ

Summary: I have published papers in various prestigious AI/CV/ML conferences including CVPR (22, **1 CVPR Best Paper Nomination**), ICCV (11), ECCV (11), NeurIPS (5), ICLR (2), AAAI (9), IJCAI (5), WACV (9), IROS (3), ACM Multimedia (9), and MICCAI (3, 1 **Finalist for the MICCAI 2023 Young Scientist Publication Impact Award**).

Book Chapters

1. Sijie Zhu*, **Chen Chen**, Waqas Sultani, "Video Anomaly Detection for Smart Surveillance", Computer Vision: A Reference Guide, 2020.
2. Waqas Sultani, Qazi Ammar Arshad, **Chen Chen**, "Action Recognition in Real-World Videos", Computer Vision: A Reference Guide, 2020.
3. Ju Shen, Sen-ching Cheung, **Chen Chen**, Ruixu Liu. "Missing Depth Data In-painting", In Encyclopedia of Image Processing, published by Taylor & Francis Group, 2018.

Peer Reviewed Journals ("IF" denotes Journal **I**mpact **F**actor)

1. Kai Zhang, Rong Zhou, Eashan Adhikarla, Zhiling Yan, Yixin Liu, Jun Yu, Zhengliang Liu, Xun Chen, Brian Davison, Hui Ren, Jing Huang, **Chen Chen**, Yuyin Zhou, Sunyang Fu, Wei Liu, Tianming Liu, Xiang Li, Yong Chen, Lifang He, James Zou, Quanzheng Li, Hongfang Liu, Lichao Sun, "A Generalist Vision-Language Foundation Model for Diverse Biomedical Tasks", **Nature Medicine**, 2024. (**IF = 58.7**)
2. Basavaraju, Adarsh, Edwin Davidson, Giulio Diracca, **Chen Chen**, and Swadeshmukul Santra. 2024. "Pesticide Residue Coverage Estimation on Citrus Leaf Using Image Analysis Assisted by Machine Learning", Applied Sciences 14, no. 22: 10087. https://doi.org/10.3390/app142210087.
3. Xiaohan Zhang, Xingyu Li, Waqas Sultani, **Chen Chen**, Safwan Wshah, "GeoDTR+: Toward Generic Cross-view Geolocalization via Geometric Disentanglement", IEEE Transactions on Pattern Analysis and Machine Intelligence (T-PAMI), 2024. (IF = 20.8)
4. Mahdi Morafah, Hojin Matthew Chang, **Chen Chen**, Bill Lin, "Federated Learning Client Pruning for Noisy Labels", ACM Transactions on Modeling and Performance Evaluation of Computing Systems, 2024.

5. Saeed Vahidian, Mahdi Morafah, **Chen Chen**, Mubarak Shah, Bill Lin, "Rethinking Data Heterogeneity in Federated Learning: Introducing a New Notion and Standard Benchmarks", IEEE Transactions on Artificial Intelligence (TAI), 2023. (IF = 4.9)

6. Ce Zheng*, Wenhan Wu, **Chen Chen**, Taojiannan Yang*, Sijie Zhu*, Ju Shen, Nasser Kehtarnavaz, Mubarak Shah, "Deep Learning-Based Human Pose Estimation: A Survey", ACM Computing Surveys, 2023. (IF = 14.324)

7. Pinyoanuntapong, Pinyarash, Prabhu Janakaraj, Ravikumar Balakrishnan, Minwoo Lee, **Chen Chen**, and Pu Wang. "Edgeml: towards network-accelerated federated learning over wireless edge." Computer Networks 219 (2022): 109396. (IF = 5.493)

8. Pinyoanuntapong, Pinyarash, Wesley Houston Huff, Minwoo Lee, **Chen Chen**, and Pu Wang. "Toward scalable and robust AIoT via decentralized federated learning." IEEE Internet of Things Magazine 5, no. 1 (2022): 30-35. (IF = 10.238)

9. Li, Jiangyun, Hong Yu, **Chen Chen**, Meng Ding, and Sen Zha. "Category guided attention network for brain tumor segmentation in MRI." Physics in Medicine & Biology 67, no. 8 (2022): 085014.

10. Li, Jiangyun, Sen Zha, **Chen Chen**, Meng Ding, Tianxiang Zhang, and Hong Yu. "Attention guided global enhancement and local refinement network for semantic segmentation." IEEE Transactions on Image Processing 31 (2022): 3211-3223. (IF = 11.041)

11. Taojiannan Yang*, Sijie Zhu*, Matias Mendieta*, Pu Wang, Ravikumar Balakrishnan, Minwoo Lee, Tao Han, Mubarak Shah, **Chen Chen**, "MutualNet: Adaptive ConvNet via Mutual Learning from Different Model Configurations", IEEE Transactions on Pattern Analysis and Machine Intelligence (T-PAMI), 2022. (IF = 16.389)

12. Feng Guo, Zhuocheng Jiang, Yi Wang, **Chen Chen**, Yu Qian, "Dense Traffic Detection at Highway-Railroad Grade Crossings", IEEE Transactions on Intelligent Transportation Systems (T-ITS), 2022. (IF = 6.492)

13. Qazi Ammar Arshad, Mohsen Ali, Saeed-ul Hassan, **Chen Chen**, Ayisha Imran, Ghulam Rasul, Waqas Sultani, "A Dataset and Benchmark for Malaria Life-Cycle Classification in Thin Blood Smear Images", Neural Computing and Applications, 2021. (IF = 5.606)

14. Sijie Zhu*, Taojiannan Yang*, **Chen Chen**, "Visual Explanation for Deep Metric Learning", IEEE Transactions on Image Processing, 2021. (IF = 10.856)

15. Sumanta Bhattacharyya*, Ju Shen, Stephen Welch, **Chen Chen**, "Efficient Unsupervised Monocular Depth Estimation Using Attention Guided Generative Adversarial Network", Journal of Real-Time Image Processing, 2021.

16. Ruixu Liu, Ju Shen, He Wang, **Chen Chen**, Sen-ching Cheung, Vijayan Asari, "Enhanced 3D Human Pose Estimation from Videos by using Attention-Based Neural Network with Dilated Convolutions", International Journal of Computer Vision, 2021. (IF = 5.698)

17. Yu Shen, Sijie Zhu*, **Chen Chen**, Qian Du, Liang Xiao, Jianyu Chen, Delu Pan, "Efficient Deep Learning of Non-local Features for Hyperspectral Image Classification", IEEE Transactions on Geoscience and Remote Sensing, 2020. (IF = 5.855)

18. **Chen Chen**, Raymond Surette, Mubarak Shah, "Automated Monitoring for Security Camera Networks: Promise from Computer Vision Labs", Security Journal, 2020. (IF = 0.838)

19. **Chen Chen**, Mengyuan Liu, Hong Liu, Baochang Zhang, Jungong Han, Nasser Kehtarnavaz, "Multi-Temporal Depth Motion Maps-Based Local Binary Patterns for 3-D Human Action Recognition", IEEE Access, 2017. (IF = 3.745)

20. **Chen Chen**, Roozbeh Jafari, Nasser Kehtarnavaz, "A Survey of Depth and Inertial Sensor Fusion for Human Action Recognition", Multimedia Tools and Applications, 2017. (IF = 2.313)

21. Longhui Huang, **Chen Chen**, Wei Li, Qian Du, "Remote Sensing Image Scene Classification Using Multi-scale Completed Local Binary Patterns and Fisher Vectors", Remote Sensing, 2016. (IF = 4.509)

22. Jinyi Zou, Wei Li, **Chen Chen**, Qian Du, "Scene Classification Using Local and Global Features with Collaborative Representation Fusion", Information Sciences, 2016. (IF = 5.91)

23. **Chen Chen**, Roozbeh Jafari, Nasser Kehtarnavaz, "A Real-Time Human Action Recognition System Using Depth and Inertial Sensor Fusion", IEEE Sensors Journal, 2016. (IF = 3.073)
24. **Chen Chen**, Baochang Zhang, Hongjun Su, Wei Li, Lu Wang, "Land-Use Scene Classification Using Multi-Scale Completed Local Binary Patterns", Signal, Image and Video Processing, 2016. (IF = 1.794)
25. **Chen Chen**, Kui Liu, Nasser Kehtarnavaz, "Real-Time Human Action Recognition Based on Depth Motion Maps", Journal of Real-Time Image Processing, 2016. (IF = 1.968)
26. Wei Li, **Chen Chen**, Hongjun Su, Qian Du, "Local Binary Patterns and Extreme Learning Machine for Hyperspectral Imagery Classification", IEEE Transactions on Geoscience and Remote Sensing, 2015. (IF = 5.855)
27. **Chen Chen**, Roozbeh Jafari, Nasser Kehtarnavaz, "Improving Human Action Recognition Using Fusion of Depth Camera and Inertial Sensors", IEEE Transactions on Human-Machine Systems, 2015. (IF = 3.374)
28. Kui Liu, **Chen Chen**, Roozbeh Jafari, Nasser Kehtarnavaz, "Fusion of Inertial and Depth Sensor Data for Robust Hand Gesture Recognition", IEEE Sensors Journal, 2014. (IF = 3.073)
29. **Chen Chen**, Wei Li, Hongjun Su, Kui Liu, "Spectral-Spatial Classification of Hyperspectral Image based on Kernel Extreme Learning Machine", Remote Sensing, 2014. (IF = 4.509)
30. **Chen Chen**, Wei Li, Eric W. Tramel, Minshan Cui, Saurabh Prasad, James 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. (IF = 3.827)
31. **Chen Chen**, Wei Li, Eric W. Tramel, James E. Fowler, "Reconstruction of Hyperspectral Imagery from Random Projections Using Multi-hypothesis Prediction", IEEE Transactions on Geoscience and Remote Sensing, 2014. (IF = 5.855)

Peer Reviewed Conference Papers

1. Ahmad Arrabi, Xiaohan Zhang, Waqas Sultani, **Chen Chen**, Safwan Wshah, "Cross-View Meets Diffusion: Aerial Image Synthesis with Geometry and Text Guidance", IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2025.
2. Ce Zheng*, Xianpeng Liu, Qucheng Peng*, Tianfu Wu, Pu Wang, **Chen Chen**, "DiffMesh: A Motion-aware Diffusion Framework for Human Mesh Recovery from Videos", IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2025.
3. Matias Mendieta*, Guangyu Sun*, and **Chen Chen**, "Navigating Heterogeneity and Privacy in One-Shot Federated Learning with Diffusion Models", IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), 2025.
4. Mahdi Morafah, Vyacheslav Kungurtsev, Hojin Matthew Chang, **Chen Chen**, Bill Lin, "Towards Diverse Device Heterogeneous Federated Learning via Task Arithmetic Knowledge Integration", Thirty-eighth Annual Conference on Neural Information Processing Systems (NeurIPS), 2024.
5. Lei Wang, Jieming Bian, Letian Zhang, **Chen Chen**, Jie Xu, "Taming Cross-Domain Representation Variance in Federated Prototype Learning with Heterogeneous Data Domains", Thirty-eighth Annual Conference on Neural Information Processing Systems (NeurIPS), 2024.
6. Liyun Zhu, Lei Wang, Arjun Raj, Tom Gedeon, **Chen Chen**, "Advancing Video Anomaly Detection: A Concise Review and a New Dataset", Thirty-eighth Annual Conference on Neural Information Processing Systems (NeurIPS), 2024.
7. Zonglin Lyu*, Ming Li*, Jianbo Jiao, and **Chen Chen**, "Frame Interpolation with Consecutive Brownian Bridge Diffusion", ACM Multimedia (ACM MM), 2024.
8. Wenshuo Chen, Hongru Xiao, Erhang Zhang, Lijie Hu, Lei Wang, Mengyuan Liu, **Chen Chen**, "SATO: Stable Text-to-Motion Framework", ACM Multimedia (ACM MM), 2024.

9. Peiming Li, Ziyi Wang, Mengyuan Liu, Hong Liu, **Chen Chen**, "ClickDiff: Click to Induce Semantic Contact Map for Controllable Grasp Generation with Diffusion Models", ACM Multimedia (ACM MM), 2024.

10. Wenhan Wu*, Ce Zheng*, Zihao Yang, **Chen Chen**, Srijan Das, Aidong Lu, "Frequency Guidance Matters: Skeletal Action Recognition by Frequency-Aware Mixed Transformer", ACM Multimedia (ACM MM), 2024.

11. Jinfu Liu, **Chen Chen**, Mengyuan Liu, "Multi-Modality Co-Learning for Efficient Skeleton-based Action Recognition", ACM Multimedia (ACM MM), 2024.

12. Ming Li*, Taojiannan Yang*, Huafeng Kuang, Jie Wu, Zhaoning Wang, Xuefeng Xiao, **Chen Chen**, "ControlNet++: Improving Conditional Controls with Efficient Consistency Feedback", European Conference on Computer Vision (ECCV), 2024.

13. Guangyu Sun*, Matias Mendieta*, Aritra Dutta, Xin Li, and **Chen Chen**, "Towards Multi-modal Transformers in Federated Learning", European Conference on Computer Vision (ECCV), 2024.

14. Umar Khalid*, Hasan Iqbal, Azib Farooq, Jing Hua, **Chen Chen**, "3DEgo: 3D Editing on the Go!", European Conference on Computer Vision (ECCV), 2024.

15. Umar Khalid*, Hasan Iqbal, Muhammad Tayyab, Md Nazmul Karim, Jing Hua, **Chen Chen**, "LatentEditor: Text Driven Local Editing of 3D Scenes", European Conference on Computer Vision (ECCV), 2024.

16. Ekkasit Pinyoanuntapong, Muhammad Usama Saleem, Pu Wang, Minwoo Lee, Srijan Das, **Chen Chen**, "BAMM: Bidirectional Autoregressive Motion Model", European Conference on Computer Vision (ECCV), 2024.

17. Md Nazmul Karim, Hasan Iqbal, Umar Khalid*, **Chen Chen**, Jing Hua, "Free-Editor: Zero-shot Text-driven 3D Scene Editing", European Conference on Computer Vision (ECCV), 2024.

18. Xiang Fang, Zeyu Xiong, Wanlong Fang, Xiaoye Qu, **Chen Chen**, Jianfeng Dong, Keke Tang, Pan Zhou, Yu Cheng, Daizong Liu, "Rethinking Weakly-supervised Video Temporal Grounding From a Game Perspective", European Conference on Computer Vision (ECCV), 2024.

19. Aakash Kumar*, **Chen Chen**, Ajmal Mian, Neils Lobo, Mubarak Shah, "Sparse Points to Dense Clouds: Enhancing 3D Detection with Limited LiDAR Data", IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2024.

20. Shilin Tian, Chase Szafranski, Ce Zheng, Fan Yao, Ahmed Louri, **Chen Chen**, Hao Zheng, "VITA: ViT Acceleration for Efficient 3D Human Mesh Recovery via Hardware-Algorithm Co-Design", Design Automation Conference (DAC), 2024.

21. Wenxuan Wang, Jiachen Shen, **Chen Chen**, Jianbo Jiao, Yan Zhang, Shanshan Song, Jiangyun Li, "Med-Tuning: Exploring Parameter-Efficient Transfer Learning for Medical Volumetric Segmentation", Medical Imaging with Deep Learning (MIDL), 2024.

22. Qucheng Peng*, Ce Zheng*, **Chen Chen**, "A Dual-Augmentor Framework for Domain Generalization in 3D Human Pose Estimation", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2024.

23. Xianpeng Liu, Ce Zheng*, Ming Qian, Nan Xue, **Chen Chen**, Zhebin Zhang, Chen Li, Tianfu Wu, "Multi-View Attentive Contextualization for Multi-View 3D Object Detection", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2024.

24. Ekkasit Pinyoanuntapong, Pu Wang, Minwoo Lee, **Chen Chen**, "MMM: Generative Masked Motion Model", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2024.

25. Tongtong Yuan, Xuange Zhang, Kun Liu, Bo Liu, **Chen Chen**, Jian Jin, Zhenzhen Jiao, "Towards Surveillance Video-and-Language Understanding: New Dataset, Baselines, and Challenges", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2024.

26. Xinshun Wang, Zhongbin Fang, Xia Li, Xiangtai Li, **Chen Chen**, Mengyuan Liu, "Skeleton-in-Context: Unified Skeleton Sequence Modeling with In-Context Learning", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2024.

27. Tongjia Chen, Hongshan Yu, Zhengeng Yang, Zechuan Li, Wei Sun, **Chen Chen**, "OST: Refining Text Knowledge with Optimal Spatio-Temporal Descriptor for General Video Recognition", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2024.

28. Li Ren, **Chen Chen**, Liqiang Wang, Kien A. Hua, "Learning Semantic Proxies from Visual Prompts for Parameter-Efficient Fine-Tuning in Deep Metric Learning", International Conference on Learning Representations (ICLR), 2024.

29. Li Ren, **Chen Chen**, Liqiang Wang, Kien Hua, "Towards Improved Proxy-based Deep Metric Learning via Data-Augmented Domain Adaptation", Thirty-Eighth AAAI Conference on Artificial Intelligence (AAAI), 2024.

30. Hasan Iqbal, Umar Khalid*, **Chen Chen**, Jing Hua, "Unsupervised Anomaly Detection in Medical Images Using Masked Diffusion Model", The 14th International Workshop on Machine Learning in Medical Imaging (MLMI), 2023.

31. Ce Zheng*, Matias Mendieta*, **Chen Chen**, "POSTER: A Pyramid Cross-Fusion Transformer Network for Facial Expression Recognition", 11th International Workshop on Analysis and Modeling of Faces and Gestures, 2023.

32. Ming Li*, Jie Wu, Xionghui Wang, **Chen Chen**, Jie Qin, Xuefeng Xiao, Rui Wang, Min Zheng, Xin Pan, "AlignDet: Aligning Pre-training and Fine-tuning in Object Detection", IEEE/CVF International Conference on Computer Vision (ICCV), 2023.

33. Qucheng Peng*, Ce Zheng*, **Chen Chen**, "Source-free Domain Adaptive Human Pose Estimation", IEEE/CVF International Conference on Computer Vision (ICCV), 2023.

34. Andong Deng*, Taojiannan Yang*, **Chen Chen**, "A Large-scale Study of Spatiotemporal Representation Learning with a New Benchmark on Action Recognition", IEEE/CVF International Conference on Computer Vision (ICCV), 2023.

35. Matias Mendieta*, Boran Han, Xingjian Shi, Yi Zhu, **Chen Chen**, Mu Li, "GFM: Building Geospatial Foundation Models via Continual Pretraining", IEEE/CVF International Conference on Computer Vision (ICCV), 2023.

36. Guangyu Sun*, Matias Mendieta*, Jun Luo, Shandong Wu, **Chen Chen**, "FedPerfix: Towards Partial Model Personalization of Vision Transformers in Federated Learning", IEEE/CVF International Conference on Computer Vision (ICCV), 2023.

37. Jun Luo, Matias Mendieta*, **Chen Chen**, Shandong Wu, "PGFed: Personalize Each Client's Global Objective for Federated Learning", IEEE/CVF International Conference on Computer Vision (ICCV), 2023.

38. Saeed Vahidian, Sreevatsank Kadaveru, Woonjoon Baek, Weijia Wang, Vyacheslav Kungurtsev, **Chen Chen**, Mubarak Shah, Bill Lin, "When Do Curricula Work in Federated Learning?", IEEE/CVF International Conference on Computer Vision (ICCV), 2023.

39. Hao Chen, Chenyuan Qu, **Chen Chen**, Yu Zhang, Jianbo Jiao, "Multi-view Self-supervised Disentanglement for General Image Denoising", IEEE/CVF International Conference on Computer Vision (ICCV), 2023.

40. Lijun Li, Linrui Tian, Xindi Zhang, Qi Wang, Bang Zhang, Liefeng Bo, Mengyuan Liu, **Chen Chen**, "RenderIH: A Large-scale Synthetic Dataset for 3D Interacting Hand Pose Estimation", IEEE/CVF International Conference on Computer Vision (ICCV), 2023.

41. Umar Khalid*, Hasan Iqbal, Saeed Vahidian, Jing Hua, **Chen Chen**, "CEFHRI: A Communication Efficient Federated Learning Framework for Recognizing Industrial Human-Robot Interaction", IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2023.

42. Shengnan Hu, Ce Zheng*, Zixiang Zhou, **Chen Chen**, Gita Sukthankar, "LAMP: Leveraging Language Prompts for Multi-person Pose Estimation", IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2023

43. Ekkasit Pinyoanuntapong, Ayman Ali, Kalvik Jakkala, Pu Wang, Minwoo Lee, Qucheng Peng, **Chen Chen**, Zhi Sun, "GaitSADA: Self-Aligned Domain Adaptation for mmWave Gait Recognition", IEEE 20th International Conference on Mobile Ad Hoc and Smart Systems (MASS), 2023.

44. Yilei Hua, Wenhan Wu, Ce Zheng*, Aidong Lu, Mengyuan Liu, **Chen Chen**, Shiqian Wu, "Part Aware Contrastive Learning for Self-Supervised Action Recognition", 32nd International Joint Conference on Artificial Intelligence (IJCAI), 2023.

45. Qucheng Peng*, Zhengming Ding, Lingjuan Lyu, Lichao Sun, **Chen Chen**, "RAIN: Regularization on Input and Network for Black-Box Domain Adaptation", 32nd International Joint Conference on Artificial Intelligence (IJCAI), 2023.

46. Sijie Zhu*, Linjie Yang, **Chen Chen,** Mubarak Shah, Xiaohui Shen, Heng Wang, "R2Former: Unified Retrieval and Reranking Transformer for Place Recognition", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

47. Sijie Zhu*, Zhe Lin, Scott Cohen, Jason Kuen, Zhifei Zhang, **Chen Chen**, "TopNet: Transformer-based Object Placement Network for Image Compositing", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

48. Ce Zheng*, Matías Mendieta*, Taojiannan Yang*, Guo-Jun Qi, **Chen Chen**, "FeatER: An Efficient Network for Human Reconstruction via Feature Map-Based TransformER", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

49. Ce Zheng*, Xianpeng Liu, Guo-Jun Qi, **Chen Chen**, "POTTER: Pooling Attention Transformer for Efficient Human Mesh Recovery", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

50. Qitao Zhao, Ce Zheng*, Mengyuan Liu, Pichao Wang, **Chen Chen**, "PoseFormerV2: Exploring Frequency Domain for Efficient and Robust 3D Human Pose Estimation", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

51. Ishan Dave, Mamshad Nayeem Rizve, **Chen Chen**, Mubarak Shah, "TimeBalance: Temporally-Invariant and Temporally-Distinctive Video Representations for Semi-Supervised Action Recognition", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2023.

52. Taojiannan Yang*, Linjie Yang, Xiaojie Jin, **Chen Chen**, "Revisiting Training-free NAS Metrics: An Efficient Training-based Method", Winter Conference on Applications of Computer Vision (WACV), 2023.

53. Taojiannan Yang*, Yi Zhu, Yusheng Xie, Aston Zhang, **Chen Chen**, Mu Li, "AIM: Adapting Image Models for Efficient Video Action Recognition", International Conference on Learning Representations (ICLR), 2023.

54. Saeed Vahidian, Mahdi Morafah, Weijia Wang, Vyacheslav Kungurtsev, **Chen Chen**, Mubarak Shah, Bill Lin, "Efficient Distribution Similarity Identification in Clustered Federated Learning via Principal Angles Between Client Data Subspaces", AAAI Conference on Artificial Intelligence (AAAI), 2023.

55. Xian Zhong, Zipeng Li, Shuqin Chen, Kui Jiang, **Chen Chen**, Mang Ye, "Refined Semantic Enhancement Towards Frequency Diffusion for Video Captioning", AAAI Conference on Artificial Intelligence (AAAI), 2023.

56. Mengyuan Liu, Fanyang Meng, **Chen Chen**, Songtao Wu, "Novel Motion Patterns Matter for Practical Skeleton-based Action Recognition", AAAI Conference on Artificial Intelligence (AAAI), 2023.

57. Sijie Zhu*, Zhe Lin, Scott Cohen, Jason Kuen, Zhifei Zhang, **Chen Chen**, "GALA: Toward Geometry-and-Lighting-Aware Object Search for Compositing", European Conference on Computer Vision (ECCV), 2022.

58. Ce Zheng*, Matias Mendieta*, Pu Wang, Aidong Lu, **Chen Chen**, "A Lightweight Graph Transformer Network for Human Mesh Reconstruction from 2D Human Pose", ACM Multimedia (ACM MM), 2022.

59. Shruti Vyas, **Chen Chen**, Mubarak Shah, "GAMa: Cross-view Video Geo-localization", European Conference on Computer Vision (ECCV), 2022.

60. Wenxuan Wang, **Chen Chen**, Jing Wang, Sen Zha, Yan Zhang, Jiangyun Li, "Med-DANet: Dynamic Architecture Network for Efficient Medical Volumetric Segmentation", European Conference on Computer Vision (ECCV), 2022.

61. Kui Jiang, Zhongyuan Wang, **Chen Chen**, Zheng Wang, Laizhong Cui, Chia-Wen Lin, "Magic ELF: Image Deraining Meets Association Learning and Transformer", ACM Multimedia (ACM MM), 2022.

62. Matias Mendieta*, Taojiannan Yang*, Pu Wang, Minwoo Lee, Zhengming Ding, **Chen Chen**, "Local Learning Matters: Rethinking Data Heterogeneity in Federated Learning", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022. (**Best Paper Nomination**)

63. Sijie Zhu*, Mubarak Shah, **Chen Chen**, "TransGeo: Transformer Is All You Need for Cross-view Image Geo-localization", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022.

64. Ishan Rajendrakumar Dave, **Chen Chen**, Mubarak Shah, "SPAct: Self-supervised Privacy Preservation for Action Recognition", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022.

65. Weiping Yu, Sijie Zhu*, Taojiannan Yang*, **Chen Chen**, "Consistency-based Active Learning for Object Detection", Workshop on Learning with Limited Labelled Data for Image and Video Understanding in conjunction with IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022.

66. Momal Ijaz*, Renato Diaz*, **Chen Chen**, "Multi-modal Transformer for Nurse Activity Recognition", The Fifth International Workshop on Computer Vision for Physiological Measurement in conjunction with IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2022.

67. Zhen Li, Qian Chen, **Chen Chen**, Yayi Zou, Shouhuai Xu, "RoPGen: Towards Robust Code Authorship Attribution via Automatic Coding Style Transformation", 44th International Conference on Software Engineering (ICSE), 2022.

68. Kui Jiang, Zhongyuan Wang, Zheng Wang, **Chen Chen**, Peng Yi, Tao Lu, Chia-Wen Lin, "Degrade is Upgrade: Learning Degradation for Low-light Image Enhancement", AAAI Conference on Artificial Intelligence (AAAI), 2022 (Acceptance Rate = 15%)

69. Ce Zheng*, Sijie Zhu*, Matias Mendieta*, Taojiannan Yang*, **Chen Chen**, Zhengming Ding, "3D Human Pose Estimation with Spatial and Temporal Transformers", IEEE/CVF International Conference on Computer Vision (ICCV), 2021.

70. Sijie Zhu*, Taojiannan Yang*, **Chen Chen**, "VIGOR: Cross-View Image Geo-localization beyond One-to-one Retrieval", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021.

71. Hui Lv, **Chen Chen**, Zhen Cui, Chunyan Xu, Yong Li, Jian Yang, "Learning Normal Dynamics in Videos with Meta Prototype Network", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021.

72. Wenxuan Wang, **Chen Chen**, Meng Ding, Jiangyun Li, Hong Yu, Sen Zha, "TransBTS: Multimodal Brain Tumor Segmentation Using Transformer", International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), 2021.

73. Sijie Zhu*, Taojiannan Yang*, **Chen Chen**, "Revisiting Street-to-Aerial View Image Geo-localization and Orientation Estimation", IEEE Winter Conference on Applications of Computer Vision (WACV), 2021.

74. Weiping Yu, Taojiannan Yang*, **Chen Chen**, "Towards Resolving the Challenge of Long-tail Distribution in UAV Images for Object Detection", IEEE Winter Conference on Applications of Computer Vision (WACV), 2021.

75. Taojiannan Yang*, Sijie Zhu*, **Chen Chen**, "GradAug: A New Regularization Method for Deep Neural Networks", Neural Information Processing Systems (NeurIPS), 2020.

76. Taojiannan Yang*, Sijie Zhu*, **Chen Chen**, Yan Shen, Mi Zhang, Andrew Willis, "MutualNet: Adaptive ConvNet via Mutual Learning from Network Width and Resolution", European Conference on Computer Vision (ECCV), 2020.

77. Pinyarash Pinyoanuntapong, Prabhu Janakaraj, Pu Wang, Minwoo Lee, **Chen Chen**, "FedAir: Towards Multi-hop Federated Learning Over-the-Air", IEEE 21st International Workshop on Signal Processing Advances in Wireless Communications (SPAWC), 2020.

78. Li'an Zhuo, Baochang Zhang, Hanlin Chen, Linlin Yang, **Chen Chen**, Yanjun Zhu, David Doermann, "CP-NAS: Child-Parent Neural Architecture Search for Binary Neural Networks", International Joint Conference on Artificial Intelligence (IJCAI), 2020.

79. Changlin Li, Taojiannan Yang*, Sijie Zhu*, **Chen Chen**, Shanyue Guan, "Density Map Guided Object Detection in Aerial Image", IEEE Conference on Computer Vision and Pattern Recognition (CVPR) (EarthVision Workshop), 2020.

80. Ruixu Liu, Ju Shen, He Wang, **Chen Chen**, Sen-ching Cheung, Vijayan Asari, "Attention Mechanism Exploits Temporal Contexts: Real-time 3D Human Pose Reconstruction", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020 (Oral)

81. Kui Jiang, Zhongyuan Wang, Peng Yi, **Chen Chen**, Baojin Huang, Yimin Luo, Jiayi Ma, Junjun Jiang, "Multi-Scale Progressive Fusion Network for Single Image Deraining", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020.

82. **Chen Chen**, Xiaopeng Liu, Meng Ding, Junfeng Zheng, Jiangyun Li, "3D Dilated Multi-Fiber Network for Real-time Brain Tumor Segmentation in MRI", International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI), 2019.

83. Rui Hou, **Chen Chen**, Mubarak Shah, Rahul Sukthankar, "An Efficient 3D CNN for Action/Object Segmentation in Video", British Machine Vision Conference (BMVC), 2019.

84. Bin Sun, **Chen Chen**, Yingying Zhu, Jianmin Jiang, "GEOCAPSNET: Ground to Aerial View Image Geo-localization using Capsule Network", IEEE International Conference on Multimedia and Expo (ICME) 2019.

85. Mengyuan Liu, Fanyang Meng, **Chen Chen**, Songtao Wu, "Joint Dynamic Pose Image and Space Time Reversal for Human Action Recognition from Videos", 33rd AAAI Conference on Artificial Intelligence (AAAI), 2019.

86. Li'an Zhuo, Baochang Zhang, **Chen Chen**, David Doermann, Jianzhuang Liu, Qixiang Ye, "Calibrated Stochastic Gradient Descent for Convolutional Neural Networks", 33rd AAAI Conference on Artificial Intelligence (AAAI), 2019.

87. Chunyu Xie, Ce Li, Baochang Zhang, **Chen Chen**, Jungong Han, Changqing Zou, Jianzhuang Liu, "Memory Attention Networks for Skeleton-based Action Recognition", International Joint Conference on Artificial Intelligence (IJCAI), 2018.

88. Waqas Sultani, **Chen Chen**, Mubarak Shah, "Real-world Anomaly Detection in Surveillance Videos", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018.

89. Rui Hou, **Chen Chen**, Mubarak Shah, "Tube Convolutional Neural Network (T-CNN) for Action Detection in Videos", International Conference on Computer Vision (ICCV), 2017.

90. Yicong Tian, **Chen Chen**, Mubarak Shah, "Cross-View Image Matching for Geo-localization in Urban Environments", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017.

91. Jie Qin, Li Liu, Ling Shao, Bingbing Ni, **Chen Chen**, Fumin Shen, Yunhong Wang, "Binary Coding for Partial Action Analysis with Limited Observation Ratios", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2017.

92. **Chen Chen**, Baochang Zhang, Alessio Del Bue, Vittorio Murino, "Manifold Constrained Low-Rank Decomposition", International Conference on Computer Vision Workshop (ICCV-Workshop), 2017.

93. Neha Dawar, **Chen Chen**, Roozbeh Jafari, Nasser Kehtarnavaz, "Real-time Continuous Action Detection and Recognition using Depth Images and Inertial Signals", IEEE International Symposium on Industrial Electronics, Edinburgh, United Kingdom, 2017.

94. **Chen Chen**, Huiyan Hao, Roozbeh Jafari, Nasser 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.

95. **Chen Chen**, Mengyuan Liu, Baochang Zhang, Jungong Han, Junjun Jiang, Hong Liu, "3D Action Recognition Using Multi-temporal Depth Motion Maps and Fisher Vector", International Joint Conference on Artificial Intelligence (IJCAI), 2016.

96. Mengyuan Liu, Hong Liu, **Chen Chen**, Maryam Najafian, "Energy-Based Global Ternary Image for Action Recognition Using Sole Depth Sequences", IEEE nternational Conference on 3D Vision (3DV), 2016.

97. Suolan Liu, **Chen Chen**, Nasser 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.

98. **Chen Chen**, Roozbeh Jafari, Nasser Kehtarnavaz, "Fusion of Depth, Skeleton, and Inertial Data for Human Action Recognition", IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2016.

99. Junjun Jiang, **Chen Chen**, Xin Song, Zhihua Cai, "Hyperspectral Image Classification Using Set-to-Set Distance", IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2016.

100. **Chen Chen**, Zhenjie Hou, Baochang Zhang, Junjun Jiang, Yun Yang, "Gradient Local Autocorrelations and Extreme Learning Machine for Depth-Based Activity Recognition", International Symposium on Visual Computing (ISVC), 2015.

101. **Chen Chen**, Roozbeh Jafari, Nasser 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), 2015.

102. **Chen Chen**, Libing Zhou, Jianzhong Guo, Wei Li, Hongjun Su, Fangda Guo, "Gabor-Filtering-Based Completed Local Binary Patterns for Land-Use Scene Classification", IEEE International Conference on Multimedia Big Data, 2015.

103. **Chen Chen**, Roozbeh Jafari, Nasser Kehtarnavaz, "Action Recognition from Depth Sequences Using Depth Motion Maps-based Local Binary Patterns", IEEE Winter Conference on Applications of Computer Vision (WACV), 2015.

104. **Chen Chen**, Kui Liu, Roozbeh Jafari, Nasser Kehtarnavaz, "Home-based Senior Fitness Test Measurement System Using Collaborative Inertial and Depth Sensors", IEEE Engineering in Medicine and Biology Society (EMBC), 2014.

105. **Chen Chen**, Roozbeh Jafari, Nasser Kehtarnavaz, "A Medication Adherence Monitoring System for Pill Bottles Based on a Wearable Inertial Sensor", IEEE Engineering in Medicine and Biology Society (EMBC), 2014.

106. **Chen Chen**, James E. Fowler, "Single-Image Super-Resolution Using Multihypothesis Prediction", IEEE Asilomar Conference on Signals, Systems, and Computers, 2012.

107. **Chen Chen**, Eric W. Tramel, and James E. Fowler, "Compressed-Sensing Recovery of Images and Video Using Multi-hypothesis Predictions", IEEE Asilomar Conference on Signals, Systems, and Computers, 2011.

Patents

1. Roozbeh Jafari, Nasser Kehtarnavaz, **Chen Chen**, "Wearable medication adherence monitoring", US Patent # 9971874, issued May 2018.

2. Nasser Kehtarnavaz, Roozbeh Jafari, Kui Liu, **Chen Chen**, Jian Wu, "Fusion of inertial and depth sensors for movement measurements and recognition", US Patent #10432842, issued October 2019.

Patents filed at UCF:

1. Non-Provisional Patent Application Title: Autonomous Drone for Railroad Track Inspection

Non-Provisional Patent Application No.: 18/179,691
Filing Date: March 7, 2023
UCF Inventor(s): **Chen Chen**
Univ. of South Carolina Inventor(s): Yu Qian, Yi Wang
UCF Reference No.: 2022-020-02
Pending

2. Provisional Patent Application Title: Self-Supervised Privacy Preservation Action Recognition System
Provisional Patent Application No.: 63/455,451
Filing Date: Mar 29, 2023
UCF Inventor(s): Ishan Rajendrakumar Dave, **Chen Chen**, Mubarak A Shah
UCF Reference No.: 2023-019-01
Awarded

3. U.S. Provisional Patent Application Title: Cross-View Image Geo-localization
Inventor(s): Sijie Zhu, **Chen Chen**, Mubarak Shah
UCF Reference No.: 2023-034-01
Pending

4. U.S. Provisional Patent Application Title: Efficient Adaptation of Image Diffusion Models for Text-guided Video Editing
Inventor(s): MD Nazmul Karim, **Chen Chen**, Nazanin Rahnavard, Umar Khalid
UCF Tech Transfer #: 2024-005
Pending

o **Presentations**

1. "Large Scale Cross View Image Geo-localization", presentation at the CVPR 2021 tutorial on Cross-view and Cross-modal Visual Geo-Localization, 06/20/2021: https://www.sri.com/computer-vision/cvpr-2021-tutorial-on-cross-view-and-cross-modal-visual-geo-localization/
2. "Privacy-preserving video analytics", keynote talk at the 4th BIG-Surv Workshop at 2022 IEEE International Conference on Multimedia and Expo (ICME), 07/22/2022
3. "Cross-view Image Geo-localization", invited talk at Qualcomm, 8/25/2022
4. "Privacy-preserving video analytics", invited talk at University of South Florida AI+X Seminar, 9/16/2022
5. "Privacy-preserving Video Analytics", invited talk, West Virginia University, IEEE Webinar, 11/14/2022
6. "Privacy-preserving Video Analytics", keynote talk at the Workshop on Real-World Surveillance (RWS): Applications and Challenges in conjunction with WACV 2023, 01/03/2023.
7. "AI in Healthcare: From Image Analysis to Generative Models in Biomedicine" Mayo Clinic Florida, 1/25/2024
8. "Towards Efficient and Effective Visual Representation Learning", University of North Carolina at Charlotte, 3/1/2024
9. "Towards Efficient and Effective Visual Representation Learning", Emory University, 3/4/2024.

TEACHING

University of Central Florida

Spring 2025
- CAP5516 – Medical Image Computing

Spring 2024
- CAP5516 – Medical Image Computing

Spring 2023
- CAP5516 – Medical Image Computing

Fall 2022
- CAP6411 – Computer Vision Systems (Fall 2022, co-teaching with Dr. Mubarak Shah and Dr. Navid Kardan)

Spring 2022
- CAP5516 – Medical Image Computing

Spring 2018
- CAP4453 - Robot Vision (undergraduate course, 44 students, online course)

UNC-Charlotte

Spring 2021
- ECGR 6090/8090 - Special Topics: Deep Learning in Computer Vision

Fall 2020
- ECGR 3090/4090 - Introduction to Machine Learning (undergraduate course)
- ECGR 6119/8119 - Applied Artificial Intelligence

Spring 2020
- ECGR 4124/5124 - Digital Signal Processing (undergraduate course)

Fall 2019
- ECGR 6090/8090 - Special Topics: Deep Learning in Computer Vision

Spring 2019
- ECGR 6119/8119 - Applied Artificial Intelligence

Fall 2018
- ECGR 6090/8090 - Special Topics: Deep Learning in Computer Vision

STUDENTS ADVISED

o **Doctoral Dissertations Directed (UCF students)**

Completed:

- Sijie Zhu, Computer Science, December 2022. Dissertation: "Toward Real-world Cross-view Image Geo-localization". (Outstanding Dissertation Award for the College of Engineering and Computer Science at UCF)
- Taojiannan Yang, Computer Science, August 2023. Dissertation: "Towards Efficient and Effective Representation Learning for Image and Video Understanding".
- Ce Zheng, Computer Science, December 2023. Dissertation: "Reconstructing 3D Humans from Visual Data" (University award for the Outstanding Dissertation in the Engineering, Physical, Mathematical, and Life Sciences category at UCF).
- Matias Mendieta, Computer Science, August 2024. Dissertation: "Efficient and Effective Deep Learning Methods for Computer Vision in Centralized and Distributed Applications"

- Umar Khalid, Computer Engineering, November 2024. Dissertation: "Effective and Efficient Use of Diffusion Models for Editing in Computer Vision"

In Progress:

- Qucheng Peng (Topic: Domain adaptive 3D human pose and mesh estimation)
- Guangyu Sun (Topic: Multimodal federated learning)
- Andong Deng (Topic: Multimodal video understanding)
- Ming Li (Topic: Efficient image and video generation and editing with GenAI)
- Anthony Bilic (Topic: Machine learning for medical image analysis and diagnosis)
- Xuechu Yu (Topic: Efficient generative models for image restoration)
- Zonglin Lyu (Topic: Real-time image and video super-resolution)
- Yancheng Zhang (Topic: 3D scene reconstruction from sparse and multi-view perspectives)
- Aakash Kumar (co-advising with Dr. Niels Lobo at UCF) (Topic: Detection and tracking in sparse 3D point clouds)
- Wenhan Wu (co-advising with Dr. Aidong Lu at UNCC) (Topic: Human action recognition from skeleton data)

o **Master Students at UCF**
- Zhaoning Wang (graduated in May 2024)
- Momal Ijaz (graduated in Dec. 2022)
- Srinivas Venkatanarayanan

o **Master Thesis Directed (non-UCF students)**

- Changlin Li, master student, graduated in Dec. 2020 from UNC-Charlotte
  Thesis: Object Detection in Aerial Imagery
- Sumanta Bhattacharyya, master student, graduated in Dec. 2019 from UNC-Charlotte
  Thesis: Efficient Unsupervised Monocular Depth Estimation Using Attention Guided Generative Adversarial Network
- Talal Alatiah, master student, graduated in May 2020 from UNC-Charlotte
  Thesis: Recognizing Exercises and Counting Repetitions in Real Time

o **Doctoral Committee Participation at UCF**, committee member

- Dongdong Wang (Ph.D. advisor: Dr. Liqiang Wang)
- Kevin Kazemi Foroushani (Ph.D. advisor: Dr. Liqiang Wang)
- Zixiang Zhou (Ph.D. advisor: Dr. Hassan Foroosh)
- Dongjie Wang (Ph.D. advisor: Dr. Yanjie Fu)
- Aayushjungbahadur Rana (Ph.D. advisor: Dr. Yogesh Rawat)
- Madeline C. Schiappa, (Ph.D. advisor: Dr. Yogesh Rawat)
- Mdnazmul Karim, (Ph.D. advisor: Dr. Nazanin Rahnavard, ECE)
- Ishan Rajendrakumar Dave, (Ph.D. advisor: Dr. Mubarak Shah)
- Praveen Tirupattur, (Ph.D. advisor: Dr. Mubarak Shah)
- Ren Li, (Ph.D. advisor: Dr. Kien Hua)
- Chippy Banarjee, (Ph.D. advisor: Dr. Ladda Thiamwong, Burnett School of Biomedical Sciences)
- Scott Piersall (Ph.D. advisor: Dr. Liqiang Wang)
- Akash Kumar (Ph.D. advisor: Dr. Yogesh Rawat)

- Chang Liu (Ph.D. advisor: Dr. Rui Xie, Department of Statistics and Data Science)
- Zihang Zou (Ph.D. advisor: Dr. Liqiang Wang)

o **Undergraduate Student Supervised**

- Renato Diaz, supervised through LEARN (Learning Environment & Academic Research Network) program at UCF
- Nashir Janmohamed, Honors in the Major Program in Computer Science in the College of Engineering and Computer Science (Thesis chair: Dr. Gita Sukthankar)
- Ethan Frakes, Summer REU 2023
- Genesis Escobar, Summer REU 2024

o **Sponsored Senior Design Project**

- Project Title: SafeMed: Mitigating Medication Errors via AI-empowered Augmented Reality

  Project Team Members: Mathew Holden, Raj Doshi, Justin Miller, David Schneck

- Project Title: Leveraging Real-Time Pose Estimation Tools for Analyzing Exercise Performance using a Mobile Application

  Project Team Members: Max Bagatini Alves, Caleb Freckmann, Gabriela Lucas Pires Barbosa, Matthew Pryce, Lukas Schoenfeld, John Trucillo

SERVICE

Professional Activities

- Area Chair of NeurIPS 2024
- Area Chair of ACCV 2024
- Area Chair of ACM Multimedia 2019 - 2023
- Area Chair of ECCV 2022
- Area Chair of CVPR 2022
- Area Chair of ICME 2021 - 2023
- Area Chair of IEEE Winter Conference on Applications of Computer Vision, 2019, 2023
- Conference TPC member of IJCAI, ECCV, AAAI, CVPR, ICCV, MICCAI, BMVC, NeurIPS, ICLR
- **Program Chair/Co-chair**
  o [Chair] 1st International Workshop on Federated Learning for Computer Vision (FedVision-2022) in conjunction with CVPR 2022: https://sites.google.com/view/fedvision
  o [Co-Chair] The 2nd Workshop on Dynamic Neural Networks Meet Computer Vision (DNetCV) in conjunction with CVPR 2022: https://sites.google.com/view/cvpr2022-dnetcv/
  o [Chair] 2nd International Workshop on Federated Learning for Computer Vision (FedVision-2023) in conjunction with CVPR 2023: https://fedvision.github.io/fedvision-workshop
  o [Co-Chair] 1st Workshop on Capturing, Interpreting & Visualizing Indoor Living Spaces (CIVILS) in conjunction with CVPR 2023: https://sites.google.com/view/cvprcivils2023
  o [Co-Chair] Workshop on Federated Learning in Medical Imaging and Vision In conjunction with ICIAP 2023 Udine, Italy September 11-15, 2023: https://fedmedw.github.io/

- o [Co-Chair] Workshop on Computer Vision with Small Data: A Focus on Infants and Endangered Animals (CV4Smalls) In conjunction with WACV 2024, Waikoloa, Hawaii, January 3-7, 2024: https://cv4smalls.sites.northeastern.edu/
- o [Chair] The Third Workshop on Federated Learning for Computer Vision (FedVision-2024) in conjunction with CVPR 2024: https://fedvision.github.io/fedvision2024/
- o [Co-Chair] 2nd workshop on "UAVs in Multimedia: Capturing the World from a New Perspective" at ACM Multimedia 2024. https://www.zdzheng.xyz/ACMMM2024Workshop-UAV/

- **Conference Tutorial Organizer**

  - o CVPR 2021 tutorial on Cross-view and Cross-modal Visual Geo-Localization: https://www.sri.com/computer-vision/cvpr-2021-tutorial-on-cross-view-and-cross-modal-visual-geo-localization/
  - o Tutorial on "Holographic Networking: A New Frontier in Communication" in conjunction with IEEE International Conference on Communications (ICC) 2022: https://icc2022.ieee-icc.org/program/tutorials.html#tut-18
  - o CVPR 2023 Tutorial: A Comprehensive Tour and Recent Advancements toward Real-world Visual Geo-Localization: https://www.sri.com/computer-vision/cvpr-2023-a-comprehensive-tour-and-recent-advancements-toward-real-world-visual-geo-localization/

Editorial Services

- Associate Editor for Peer-Reviewed Journals

  1. IEEE Transactions on Circuits and Systems for Video Technology (2022 - Present)
  2. Journal of Real-Time Image Processing (2019 - Present)

- Guest Editor

  1. Big Data Mining and Analytics - Special Issue on Intelligent Network Video Advances based on Transformers
  2. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing — Special Issue: Semantic Extraction and Fusion of Multimodal Remote Sensing Data: Algorithms and Applications
  3. IEEE Journal of Biomedical and Health Informatics — Special Issue: Emerging IoT-driven Smart Health: from Cloud to Edge
  4. Remote Sensing — Special Issue: Joint Artificial Intelligence and Computer Vision Applications in Remote Sensing
  5. Remote Sensing — Special Issue: Robust Multispectral/Hyperspectral Image Analysis and Classification
  6. Sensors — Special Issue: Sensors Signal Processing and Visual Computing
  7. Journal of Real-Time Image Processing — Special Issue: Advances in Real-Time Image Processing for Remote Sensing