Zhengming Ding

CONTACT INFORMATION

6823 St. Charles Avenue,
New Orleans,
LA 70118, USA

Homepage: http://www.cs.tulane.edu/~zding1/
mail: zding1@tulane.edu
Cell Phone: +1(617)-390-6211

APPOINTMENT

Tenure-Track Assistant Professor, 01/2021 – Present
Department of Computer Science, Tulane University

Tenure-Track Assistant Professor, 08/2018 – 12/2020
Department of CIT, Indiana University-Purdue University Indianapolis

EDUCATION

Northeastern University, Boston, USA 09/2013–06/2018
Doctor of Philosophy, **Major:** Computer Engineering

University of Electronic Science and Technology of China, 09/2010–06/2013
Master of Engineering, **Major:** Computer Software and Theory

University of Electronic Science and Technology of China, 09/2006–07/2010
Bachelor of Engineering, **Major:** Information Security

RESEARCH INTERESTS

My research interest lies in computer vision and machine learning, with a focus on developing scalable algorithms to learn robust representations from large-scale data.
§ Deep Learning (Deep Auto-Encoder, Deep CNN, LSTM, Generative Model)
§ Transfer Learning, Multi-view Learning, Zero-Shot Learning
§ Low-Rank Modeling, Manifold Learning, Subspace Learning, Metric Learning
§ Fairness Learning, Federated Learning, Data-Protected Learning

RESEARCH EXPERIENCE

Northeastern University, 09/2013–06/2018
Position: Research Assistant, **Supervisor**: Yun Raymond Fu

Microsoft Research, 06/2017–09/2017
Position: Research Intern, **Supervisor**: Yandong Guo, Lei Zhang

Adobe Systems Incorporated, 05/2016-07/2016
Position: Data Scientist Intern, **Supervisor**: William Yan

Army Research Lab, 06/2015–08/2015
Position: Research Intern, **Supervisor**: Nasser M. Nasrabadi

TEACHING EXPERIENCE

Instructor: CMPS 7010: Research Seminar, Tulane University, 2021 Fall
Instructor: CMPS 2200: Introduction to Algorithm, Tulane University, 2021/2022 Spring
Instructor: CIT 14000: Python Programming, IUPUI, 2020 Spring
Instructor: Tech 58100: Deep Learning and Applications, IUPUI, 2019 Spring
Instructor: CIT 47900: Database Implementation and Administration, IUPUI, 2018/2019/2020 Fall

CONFERENCE TUTORIAL

[T-1] **Zhengming Ding**, Ming Shao and Handong Zhao. *Robust Multi-view Visual Learning: A Knowledge Flow Perspective*, International Joint Conference on Artificial Intelligence (IJCAI-20), Yokohama, Japan

[T-2] **Zhengming Ding**, Hongfu Liu and Handong Zhao. *Deep Multi-view Data Analytics*, Thirty-Third AAAI Conference on Artificial Intelligence (AAAI-19), Honolulu, Hawaii, USA

[T-3] **Zhengming Ding**, Ming Shao, Yun Fu. *Large-Scale Multi-view Data Analysis*, IEEE International Conference on Big Data, 2018, Seattle, WA, USA.

[T-4] **Zhengming Ding**, Ming Shao, Yun Fu. *Multi-view Visual Data Analytics*, IEEE International Conference on Computer Vision and Pattern Recognition, 2018, Salt Lake City, Utah, USA

[T-5] **Zhengming Ding**, Handong Zhao, Yun Fu. *Multi-view Face Representation*, IEEE International Conference on Automatic Face and Gesture Recognition, 2017, in Washington DC, USA

PUBLICATIONS   Research Summary:

- More than 100 peer-reviewed research papers, including one SPIE Lockheed Martin Best Paper Award, 2016 and one Best Paper Candidate in ACM MM 2017.

- Full Research Papers published in various prestigious conferences, including CVPR, ICCV, ECCV, IJCAI, AAAI, ICDM, ACM MM etc., and prestigious journals including IEEE TPAMI (impact factor 17.861), IEEE TIP (impact factor 9.340), IEEE TNNLS (impact factor 8.793), etc.

- 3707 citations; h-index: 37; i10-index: 73 (by April 2022).

Journal Papers:

[J-1] Haifeng Xia, Taotao Jing, **Zhengming Ding**. *Maximum Structural Generation Discrepancy for Unsupervised Domain Adaptation*. IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), 2022 (in press)

[J-2] Lichen Wang, **Zhengming Ding**, Kasey Lee, Seungju Han, Jae-joon Han, Changkyu Choi, Yun Fu. *Generative Multi-Label Correlation Learning*. ACM Transactions on Knowledge Discovery from Data (**TKDD**), 2022 (in press)

[J-3] Jiahua Dong, Yang Cong, Gan Sun, Zhen Fang, **Zhengming Ding**. *Where and How to Transfer: Knowledge Aggregation-Induced Transferability Perception for Unsupervised Domain Adaptation*. IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), 2022 (in press)

[J-4] Gan Sun, Yang Cong, Xu Tang, **Zhengming Ding**, and Haibin Yu. *Hierarchical Lifelong Machine Learning with "Watchdog"*. IEEE Transactions on Big Data (**TBD**), 2022 (in press)

[J-5] Bingrong Xu, Zhigang Zeng, Cheng Lian, **Zhengming Ding**. *Generative Mixup Networks for Zero-Shot Learning*. IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**), 2022 (in press)

[J-6] Taotao Jing, Haifeng Xia, Jihun Hamm, **Zhengming Ding**. *Augmented Multi-Modality Fusion for Generalized Zero-Shot Sketch-based Visual Retrieval*. IEEE Transactions on Image Processing (**TIP**), Volume: 31, Page(s): 3657 - 3668, 2022.

[J-7] Bingrong Xu, Zhigang Zeng, Cheng Lian, **Zhengming Ding**. *Few-Shot Domain Adaptation via Mixup Optimal Transport*. IEEE Transactions on Image Processing (**TIP**), vol. 31, pp. 2518-2528, 2022

[J-8] Kai Li, **Zhengming Ding**, Kunpeng Li, Yulun Zhang, and Yun Fu. *Vehicle and Person Re-Identification with Support Neighbor Loss*. IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**), volume: 33, issue: 2, page(s): 826 - 838, 2022

[J-9] Lichen Wang, **Zhengming Ding**, Yun Fu. *Generic Multi-label Annotation via Adaptive Graph and Marginalized Augmentation*. ACM Transactions on Knowledge Discovery from Data (**TKDD**), volume 16, issue 1, pp 1–20, 2022

[J-10] Jing Sun, Zhihui Wang, Wei Wang, Mingshi Yan, Haojie Li, Fuming Sun, **Zhengming Ding**. *Joint Adaptive Dual Graph and Feature Selection for Domain Adaptation*. IEEE Transactions on Circuits and Systems for Video Technology (**TCSVT**), volume: 32, issue: 3, page(s): 1453 - 1466, 2022

[J-11] Gan Sun, Yang Cong, Jiahua Dong, Yuyang Liu, **Zhengming Ding**, Haibin Yu. *What and How: Generalized Lifelong Spectral Clustering via Dual Memory*. IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), Volume: 44, Issue: 7, Page(s): 3895-3908, 2022.

[J-12] Taotao Jing, Bingrong Xu, **Zhengming Ding**. *Towards Fair Knowledge Transfer for Imbalanced Domain Adaptation*. IEEE Transactions on Image Processing (**TIP**), vol. 30, pp. 8200-8211, 2021

[J-13] Tongxin Wang, Wei Shao, Zhi Huang, Haixu Tang, Jie Zhang, **Zhengming Ding**, and Kun Huang. *MOGONET integrates multi-omics data using graphconvolutional networks allowing patientclassification and biomarker identification*. Nature Communication, 12, Article number: 3445 (2021).

[J-14] Jiahua Dong, Yang Cong, Gan Sun, Yunsheng Yang, Xiaowei Xu, **Zhengming Ding**. *Weakly-Supervised Cross-Domain Adaptation for Endoscopic Lesions Segmentation*. IEEE Transactions on Circuits and Systems for Video Technology (**TCSVT**), vol 31, issue 5, pp 2020-2033, 2021

[J-15] Bingrong Xu, Zhigang Zeng, Cheng Lian, **Zhengming Ding**. *Semi-Supervised Low-Rank Semantics Grouping for Zero-Shot Learning*. IEEE Transactions on Image Processing (**TIP**), vol. 30, pp. 2207-2219, 2021

[J-16] Qianqian Wang, **Zhengming Ding**, Zhiqiang Tao, Quanxue Gao, Yun Fu. *Generative Partial Multi-View Clustering With Adaptive Fusion and Cycle Consistency*. IEEE Transactions on Image Processing (**TIP**), vol. 30, pp. 1771-1783, 2021

[J-17] Jingjing Li, Erpeng Chen, **Zhengming Ding**, Lei Zhu, Ke Lu, and Heng-Tao Shen. *Maximum Density Divergence for Domain Adaptation*. IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), volume: 43, issue: 11, page(s): 3918 - 3930, 2021

[J-18] Shuang Li, Chi Harold Liu, Qi Wen, Qiuxia Lin, Limin Su, and **Zhengming Ding**. *Deep Residual Correction Network for Partial Domain Adaptation*. IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), volume: 43, issue: 7, page(s): 2329-2344, 2021

[J-19] Shuang Li, Chi Harold Liu, Limin Su, Binhui Xie, **Zhengming Ding**, C. L. Philip Chen, Dapeng Wu. *Discriminative Transfer Feature and Label Consistency for Cross-Domain Image Classification*. IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**), vol. 31, issue 11, pp. 4842-4856, 2020

[J-20] Zhiqiang Tao, Hongfu Liu, Sheng Li, **Zhengming Ding**, and Yun Fu. *Marginalized Multi-View Ensemble Clustering*. IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**), vol. 31, issue 2, pp. 600-611, 2020.

[J-21] Shuhui Jiang, **Zhengming Ding**, and Yun Fu. *Heterogeneous Recommendation via Deep Low-rank Sparse Collective Factorization*. IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), vol. 42, issue 5, pp. 1097-1111, 2020.

[J-22] Shuhui Jiang, Haiyi Mao, **Zhengming Ding**, and Yun Fu. *Deep Deep Decision Tree Transfer Boosting*. IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**), vol. 31, no. 2, pp. 383-395, 2020.

[J-23] Chengcheng Jia, **Zhengming Ding**, Yu Kong, and Yun Fu. *Semi-Supervised Cross-Modality Action Recognition by Latent Tensor Transfer Learning*. IEEE Transactions on Circuits and Systems for Video Technology (**TCSVT**), vol. 30, issue 9, pp. 2801-2814, 2020.

[J-24] **Zhengming Ding**, Ming Shao, and Yun Fu. *Generative Zero-Shot Learning via Low-Rank Embedded Semantic Dictionary*. IEEE Transactions on Pattern Analysis and Machine Intelligence (**TPAMI**), vol. 41, issue. 12, pp. 2861-2874, 2019.

[J-25] **Zhengming Ding**, and Yun Fu. *Deep Transfer Low-Rank Coding for Cross-Domain Learning*. IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**), vol. 30, no. 6, pp: 1768-1779, 2019.

[J-26] **Zhengming Ding**, Ming Shao, Wonjun Hwang, Sungjoo Suh, Jae-Joon Han, Changkyu Choi, and Yun Fu. *Robust Discriminative Metric Learning for Image Representation*. IEEE Transactions on Circuits and Systems for Video Technology (**TCSVT**), vol. 29, issue. 11, pp. 3173-3183, 2019.

[J-27] Weiren Yu, **Zhengming Ding**, Chunming Hu, and Hongfu Liu. *Knowledge Reused Outlier Detection*. IEEE Access, vol. 7, pp. 43763-43772, 2019.

[J-28] Hongfu Liu, Ming Shao, **Zhengming Ding**, and Yun Fu. *Structure-Preserved Unsupervised Domain Adaptation*. IEEE Transactions on Knowledge and Data Engineering (**TKDE**), vol. 31, no. 4, pp. 799-812, 2019.

[J-29] Shuyang Wang, **Zhengming Ding**, and Yun Fu. *Discerning Feature Supported Encoder for Image Representation*. IEEE Transactions on Image Processing (**TIP**), vol. 28, issue 8, pp. 3728-3738, 2019.

[J-30] Kai Li, **Zhengming Ding**, Sheng Li, and Yun Fu. *Towards Resolution-Invariant Person Re-identification via Projective Dictionary Learning*. IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**), vol. 30, no. 6, pp. 1896-1907, 2019.

[J-31] **Zhengming Ding**, and Yun Fu. *Dual Low-Rank Decompositions for Robust Cross-View Learning*. IEEE Transactions on Image Processing (**TIP**), vol. 28, no. 1, pp. 194-204, 2019.

[J-32] Lichen Wang, **Zhengming Ding**, and Yun Fu. *Low-Rank Transfer Human Motion Segmentation*. IEEE Transactions on Image Processing (**TIP**), vol. 28, no. 2, pp. 1023-1034, 2019.

[J-33] Zhiqiang Tao, Hongfu Liu, Sheng Li, **Zhengming Ding** and Yun Fu. *Robust Spectral Ensemble Clustering via Rank Minimization*. ACM Transactions on Knowledge Discovery from Data (**TKDD**), vol. 13, no. 1, article 4, 2019.

[J-34] Zhengming Ding, Nasser Nasrabadi, and Yun Fu. *Semi-supervised Deep Domain Adaptation via Coupled Neural Networks*. IEEE Transactions on Image Processing (**TIP**), vol. 27, no. 11, pp. 5214-5224, 2018.

[J-35] Shuang Li, Shiji Song, Gao Huang, **Zhengming Ding**, and Cheng Wu. Domain Invariant and Class Discriminative Feature Learning for Visual Domain Adaptation, IEEE Transactions on Image Processing (**TIP**), vol. 27, no. 9, pp. 4260-4273, 2018.

[J-36] **Zhengming Ding**, and Yun Fu. *Robust Multi-view Data Analysis through Collective Low-Rank Subspace*. IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**), vol. 29, no. 5, pp. 1986-1997, 2018.

[J-37] **Zhengming Ding**, Ming Shao, and Yun Fu. *Incomplete Multisource Transfer Learning*. IEEE Transactions on Neural Networks and Learning Systems (**TNNLS**), vol. 29, no. 2, pp. 310-323, 2018.

[J-38] **Zhengming Ding**, and Yun Fu. *Deep Domain Generalization with Structured Low-Rank Constraint*. IEEE Transactions on Image Processing (**TIP**), vol. 27, no. 1, pp. 304-313, 2018.

[J-39] Shuyang Wang, **Zhengming Ding**, and Yun Fu. *Marginalized Denoising Dictionary Learning with Locality Constraint*. IEEE Transactions on Image Processing (**TIP**), vol. 27, no. 1, pp. 500-510, 2018.

[J-40] Handong Zhao, Hongfu Liu, **Zhengming Ding**, and Yun Fu. *Consensus Regularized Multi-View Outlier Detection*. IEEE Transactions on Image Processing (**TIP**), vol. 27, no. 1, pp. 236-248, 2018.

[J-41] Handong Zhao, **Zhengming Ding**, and Yun Fu. *Ensemble Subspace Segmentation Under Block-wise Constraints*. IEEE Transactions on Circuits and Systems for Video Technology (**TCSVT**), vol. 28, no. 7, 1526-1539, 2018.

[J-42] **Zhengming Ding**, and Yun Fu. *Robust Transfer Metric Learning for Image Classification*. IEEE Transactions on Image Processing (**TIP**), vol. 26, no.2, pp. 660-670, 2017.

[J-43] Yu Kong, **Zhengming Ding**, Jun Li, and Yun Fu. *Deeply Learned View-Invariant Features for Cross-View Action Recognition*. IEEE Transactions on Image Processing (**TIP**), vol. 26, no. 6, pp. 3028-3037, 2017.

[J-44] **Zhengming Ding**, Ming Shao, and Yun Fu. *Missing Modality Transfer Learning via Latent Low-Rank Constraint*. IEEE Transactions on Image Processing (**TIP**), vol. 24, no. 11, pp. 4322-4334, 2015.

[J-45] Ke Lu, **Zhengming Ding**, and Sam Ge. *Sparse Representation Based Graph Embedding for Traffic Sign Recognition*. IEEE Transactions on Intelligent Transportation Systems (**TITS**), vol. 13, no. 4, pp. 1515-1524, 2012.

[J-46] Ke Lu, **Zhengming Ding**, and Sam Ge. *Locally Connected Graph for Visual Tracking*. Neurocomputing, vol. 120, no. 23, pp. 45-53, 2012.

[J-47] Ke Lu, **Zhengming Ding**, and Jidong Zhao. *Locally connected graph embedding for semisupervised image classification*. Journal of Electronic Imaging, vol. 21, no. 4, 2012.

Conference Papers:

[C-1] Haifeng Xia, Pu Wang, and **Zhengming Ding**. *Incomplete Multi-view Domain Adaptation via Channel Enhancement and Knowledge Transfer*. European Conference on Computer Vision (**ECCV**), 2022.

[C-2] Taotao Jing, Haifeng Xia, Renran Tian, Haoran Ding, Xiao Luo, Joshua Domeyer, Rini Sherony, and **Zhengming Ding**. *InAction: Interpretable Action Decision Making for Autonomous Driving*. European Conference on Computer Vision (**ECCV**), 2022.

[C-3] Haifeng Xia, Pu Wang, Toshiaki Koike-Akino, Ye Wang, Philip Orlik, and **Zhengming Ding**. *Adversarial Bi-Regressor Network for Domain Adaptive Regression*. International Joint Conference on Artificial Intelligence (**IJCAI**), 2022.

[C-4] Haifeng Xia, and **Zhengming Ding**. *Cross-Domain Collaborative Normalization via Structural Knowledge*. Thirty-Sixth AAAI Conference on Artificial Intelligence (**AAAI**), 2022.

[C-5] 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 Finalist).

[C-6] Wenxiao Xiao, **Zhengming Ding**, Hongfu Liu. *Implicit Semantic Response Alignment for Partial Domain Adaptation*. Advances in Neural Information Processing Systems (**NeurIPS**), 2021

[C-7] Taotao Jing, Hongfu Liu and **Zhengming Ding**. *Towards Novel Target Discovery Through Open-Set Domain Adaptation*. International Conference on Computer Vision (**ICCV**), 2021.

[C-8] Taotao Jing, Handong Zhao and **Zhengming Ding**. *Adaptive Adversarial Network for Source-free Domain Adaptation*. International Conference on Computer Vision (**ICCV**), 2021.

[C-9] Ce Zheng, Sijie Zhu, Matias Mendieta, Taojiannan Yang, Chen Chen and **Zhengming Ding**. *3D Human Pose Estimation Using Spatial and Temporal Transformers*. International Conference on Computer Vision (**ICCV**), 2021.

[C-10] Haifeng Xia, Taotao Jing, Chen Chen, and **Zhengming Ding**. *Semi-supervised Domain Adaptive Retrieval via Discriminative Hashing Learning*. ACM International Conference on Multimedia (**ACM MM**), 2021.

[C-11] Mengmeng Jing, Jingjing Li, Lei Zhu, **Zhengming Ding**, Ke Lu and Yang Yang. *Balanced Open Set Domain Adaptation via Centroid Alignment*. Thirty-Fifth AAAI Conference on Artificial Intelligence (**AAAI**), 2021

[C-12] Tao Zhang, Yang Cong, Gan Sun, Jiahua Dong, Yuyang Liu and **Zhengming Ding**. *Generative Partial Visual-Tactile Fused Object Clustering*. Thirty-Fifth AAAI Conference on Artificial Intelligence (**AAAI**), 2021

[C-13] Tongxin Wang, **Zhengming Ding**, Wei Shao, Haixu Tang and Kun Huang. *Towards Fair Cross-Domain Adaptation via Generative Learning*. Winter Conference on Applications of Computer Vision (**WACV**) 2021.

[C-14] Taotao Jing, **Zhengming Ding**. *Adversarial Dual Distinct Classifiers for Unsupervised Domain Adaptation*. Winter Conference on Applications of Computer Vision (**WACV**) 2021.

[C-15] Taotao Jing, Haifeng Xia, **Zhengming Ding**. *Adaptively-Accumulated Knowledge Transfer for Partial Domain Adaptation*. ACM International Conference on Multimedia (**ACM MM**), 2020.

[C-16] Shuang Li, Binhui Xie, Jiashu Wu, Ying Zhao, Chi Harold Liu, **Zhengming Ding**. *Simultaneous Semantic Alignment Network for Heterogeneous Domain Adaptation*. ACM International Conference on Multimedia (**ACM MM**), 2020.

[C-17] Jingjing Li, Mengmeng Jing, Lei Zhu, **Zhengming Ding**, Ke Lu, Yang Yang. *Learning Modality-Invariant Latent Representations for Generalized Zero-shot Learning*. ACM International Conference on Multimedia (**ACM MM**), 2020.

[C-18] Haifeng Xia, **Zhengming Ding**. *HGNet: Hybrid Generative Network for Zero-shot Domain Adaptation*. European Conference on Computer Vision (**ECCV**), 2020.

[C-19] Yunyu Liu, Lichen Wang, Yue Bai, Can Qin, **Zhengming Ding**, Yun Fu. *Generative View-Correlation Adaptation for Semi-Supervised Multi-View Learning*. European Conference on Computer Vision (**ECCV)**, 2020.

[C-20] Haifeng Xia, **Zhengming Ding**. *Structure-Preserving Generative Cross-Domain Learning*. IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2020.

[C-21] Guanglei Yang, Haifeng Xia, Mingli Ding, **Zhengming Ding**. *Bi-Directional Generation for Unsupervised Domain Adaptation*. 34th AAAI Conference on Artificial Intelligence (**AAAI**), 2020

[C-22] Shuang Li, Chi Harold Liu, Qiuxia Lin, Binhui Xie, **Zhengming Ding**, Gao Huang, Jian Tang. *Domain Conditioned Adaptation Network*. 34th AAAI Conference on Artificial Intelligence (**AAAI**), 2020

[C-23] Tao Zhang, Yang Cong, Gan Sun, QianqianWang, **Zhengming Ding**. *Visual Tactile Fusion Object Clustering*. 34th AAAI Conference on Artificial Intelligence (**AAAI**), 2020

[C-24] Lichen Wang, **Zhengming Ding**, Seungju Han, Jae-Joon Han, Changkyu Choi, Yun Fu. *Generative Correlation Discovery Network for Multi-Label Learning*. IEEE International Conference on Data Mining (**ICDM**), 2019

[C-25] Lichen Wang, **Zhengming Ding**, Zhiqiang Tao, Yunyu Liu, Yun Fu. *Generative Multi-View Human Action Recognition*. International Conference on Computer Vision (**ICCV**), 2019.

[C-26] Jingjing Li, Erpeng Chen, **Zhengming Ding**, Lei Zhu, Ke Lu and Zi Huang. *Cycle-consistent Conditional Adversarial Transfer Networks*. ACM International Conference on Multimedia (**ACM MM**), 2019.

[C-27] Shuang Li, Chi Harold Liu, Binhui Xie, Limin Su, **Zhengming Ding** and Gao Huang. *Joint Adversarial Domain Adaptation*. ACM International Conference on Multimedia (**ACM MM**), 2019.

[C-28] **Zhengming Ding**, and Hongfu Liu. *Marginalized Latent Semantic Encoder for Zero-Shot Learning*. IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2019.

[C-29] Jingjing Li, Mengmeng Jing, Ke Lu, **Zhengming Ding**, Lei Zhu and Zi Huang. *Leveraging the Invariant Side of Generative Zero-Shot Learning*. IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2019.

[C-30] **Zhengming Ding**, Sheng Li, Ming Shao and Yun Fu. *Graph Adaptive Knowledge Transfer for Unsupervised Domain Adaptation*. European Conference on Computer Vision (**ECCV**), 2018

[C-31] **Zhengming Ding**, Ming Shao, Sheng Li, and Yun Fu. *Generic Embedded Semantic Dictionary for Robust Multi-label Classification*. IEEE International Conference on Big Knowledge (**ICBK**), 2018

[C-32] Qianqian Wang, **Zhengming Ding**, Zhiqiang Tao, Quanxue Gao, and Yun Fu. *Partial Multi-View Clustering via Consistent GAN*. IEEE International Conference on Data Mining (**ICDM**), 2018.

[C-33] Kai Li, **Zhengming Ding**, Kunpeng Li, Yulun Zhang, and Yun Fu. *Support Neighbor Loss for Person Re-Identification*. ACM International Conference on Multimedia (**ACM MM**), 2018.

[C-34] **Zhengming Ding**, Ming Shao, and Yun Fu. *Robust Multi-view Representation: A Unified Perspective from Multi-view Learning to Domain Adaption*. International Joint Conference on Artificial Intelligence (**IJCAI**), 2018.

[C-35] Lichen Wang, **Zhengming Ding**, and Yun Fu. *Adaptive Graph Guided Embedding for Multi-label Annotation*. International Joint Conference on Artificial Intelligence (**IJCAI**), 2018.

[C-36] **Zhengming Ding**, Yandong Guo, Lei Zhang, and Yun Fu. *One-Shot Face Recognition via Generative Learning*. IEEE Conference on Automatic Face and Gesture Recognition (**FG**), 2018.

[C-37] Yue Wu, **Zhengming Ding**, Hongfu Liu, Joseph Robinson, and Yun Fu. *Kinship Classification through Latent Adaptive Subspace*. IEEE Conference on Automatic Face and Gesture Recognition (**FG**), 2018.

[C-38] Kai Li, Sheng Li, **Zhengming Ding**, Weidong Zhang, and Yun Fu. *Latent Discriminant Subspace Representations for Multi-view Outlier Detection*. 32nd AAAI Conference on Artificial Intelligence (**AAAI**), 2018.

[C-39] Kai Li, **Zhengming Ding**, Sheng Li, and Yun Fu. *Semi-coupled Projective Dictionary Learning for Low-Resolution Person Re-Identification*. 32nd AAAI Conference on Artificial Intelligence (**AAAI**), 2018.

[C-40] Lichen Wang, **Zhengming Ding**, and Yun Fu. *Transferable Subspace for Human Motion Segmentation*. 32nd AAAI Conference on Artificial Intelligence (**AAAI**), 2018.

[C-41] **Zhengming Ding**, Ming Shao and Yun Fu. *Low-Rank Embedded Ensemble Semantic Dictionary for Zero-Shot Learning*. IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2017.

[C-42] Shuhui Jiang, **Zhengming Ding**, and Yun Fu. *Deep Low-rank Sparse Collective Factorization for Cross-Domain Recommendation*. ACM Multimedia (**ACM MM**), 2017 (Best Paper Candidate).

[C-43] Wencang Zhao, Yu Kong, **Zhengming Ding**, and Yun Fu. *Deep Active Learning Through Cognitive Information Parcels*. ACM International Conference on Multimedia (**ACM MM**), 2017.

[C-44] Zhiqiang Tao, Hongfu Liu, Sheng Li, **Zhengming Ding**, and Yun Fu. *From Ensemble Clustering to Multi-View Clustering*. International Joint Conference on Artificial Intelligence (**IJCAI**), 2017.

[C-45] Shuyang Wang, **Zhengming Ding**, and Yun Fu. *Feature Selection Guided Auto-Encoder*. 31st AAAI Conference on Artificial Intelligence (**AAAI**), 2017.

[C-46] Handong Zhao, **Zhengming Ding**, and Yun Fu. *Multi-view Clustering via Deep Matrix Factorization*. 31st AAAI Conference on Artificial Intelligence (**AAAI**), 2017.

[C-47] **Zhengming Ding**, Ming Shao, and Yun Fu. *Deep Robust Encoder through Locality Preserving Low-Rank Dictionary*. European Conference on Computer Vision, (**ECCV**), 2016.

[C-48] Shuyang Wang, **Zhengming Ding**, and Yun Fu. *Coupled Marginalized Auto-encoders for Cross-domain Multi-view Learning*. International Joint Conference on Artificial Intelligence (**IJCAI**), 2016.

[C-49] **Zhengming Ding**, Nasser Nasrabadi, and Yun Fu. *Deep Transfer Learning for Automatic Target Classification: MWIR to LWIR*. SPIE Defense+ Security, 2016 (Best Paper Award).

[C-50] **Zhengming Ding**, Ming Shao and Yun Fu. Transfer Learning for Image Classification with Incomplete Multiple Sources. The annual International Joint Conference on Neural Networks (**IJCNN**), 2016.

[C-51] **Zhengming Ding**, Nasser M Nasrabadi, and Yun Fu. *Task-driven Deep Transfer Learning for Image Classification*. 41st IEEE International Conference on Acoustics, Speech and Signal Processing (**ICASSP**), 2016.

[C-52] **Zhengming Ding**, and Yun Fu. *Robust Multi-view Subspace Learning through Dual Low-rank Decompositions*. Thirtieth AAAI Conference on Artificial Intelligence (**AAAI**), 2016.

[C-53] Ming Shao, **Zhengming Ding**, Handong Zhao, and Yun Fu. *Spectral Bisection Tree Guided Deep Adaptive Exemplar Autoencoder for Unsupervised Domain Adaptation*. Thirtieth AAAI Conference on Artificial Intelligence (**AAAI**), 2016.

[C-54] Handong Zhao, **Zhengming Ding**, and Yun Fu. *Pose-dependent Low-Rank Embedding for Head Pose Estimation*. Thirtieth AAAI Conference on Artificial Intelligence (**AAAI**), 2016.

[C-55] Handong Zhao, **Zhengming Ding**, Ming Shao, and Yun Fu. *Part-Level Regularized Semi-Nonnegative Coding for Semi-Supervised Learning*. IEEE International Conference on Data Mining (**ICDM**), 2015.

[C-56] **Zhengming Ding**, Ming Shao, and Yun Fu. *Deep Low-rank Coding for Transfer Learning*. International Joint Conference on Artificial Intelligence (**IJCAI**), 2015.

[C-57] Ming Shao, Sheng Li, **Zhengming Ding**, and Yun Fu. *Deep Linear Coding for Fast Graph Clustering*. International Joint Conference on Artificial Intelligence (**IJCAI**), 2015.

[C-58] **Zhengming Ding**, Sungjoo Suh, Jae-Joon Han, Changkyu Choi, and Yun Fu. *Discriminative Low-Rank Metric Learning for Face Recognition*. International Conference on Automatic Face and Gesture Recognition (**FG**), 2015.

[C-59] Ming Shao, **Zhengming Ding**, and Yun Fu. *Sparse Low-Rank Fusion based Deep Features for Missing Modality Face Recognition*. International Conference on Automatic Face and Gesture Recognition (**FG**), 2015.

[C-60] Handong Zhao, **Zhengming Ding**, and Yun Fu. *Block-wise Constrained Sparse Graph for Face Image Representation*. International Conference on Automatic Face and Gesture Recognition (**FG**), 2015.

[C-61] **Zhengming Ding**, Yun Fu. *Low-Rank Common Subspace for Multi-View Learning*. IEEE International Conference on Data Mining (**ICDM**), 2014.

[C-62] Chengcheng Jia, Yu Kong, **Zhengming Ding**, and Yun Fu. *Latent Tensor Transfer Learning for RGB-D Action Recognition*. The 22nd ACM International Conference on Multimedia (**ACM MM**), 2014.

[C-63] **Zhengming Ding**, Ming Shao, and Yun Fu. *Latent Low-Rank Transfer Subspace Learning for Missing Modality Recognition*. Twenty-Eighth AAAI Conference on Artificial Intelligence (**AAAI**), 2014.

Patent:

[P-1] Wonjun Hwang, Sungjoo Suh, JaeJoon Han, ChangKyu Choi, Yun Fu, **Zhengming Ding**, Ming Shao. *Method of extracting feature of image to recognize object*. US 20170236000 A1

[P-2] Sungjoo Suh, Yun Fu, **Zhengming Ding**, ChangKyu Choi and Jaejoon Han. *Apparatus and Method for Extracting Feature Of Image Including Object*. United States Patent Application 20160086047.

Books & Technical Report:

[B-1] **Zhengming Ding**, Handong Zhao, Yun Fu. *Learning Representation for Multi-View Data Analysis*. Springer Nature, 2018

[R-1] Haifeng Xia, Joseph Wagner, Jihun Hamm, and **Zhengming Ding**. *Automatic detection of fractures in x-ray material tomography using unsupervised machine learning*. In Proceedings of Louisiana EPSCoR RII LAMDA 2022 Symposium

[R-2] Stanley Chen, Yaobin Chen, Lauren Christopher, Mei Qiu, **Zhengming Ding**. *Road Condition Detection and Classification from Existing CCTV Feed*. Joint Transportation Research Program, 2021

[R-3] Stanley Chen, Yaobin Chen, Qiang Yi, **Zhengming Ding**. *Road Condition Detection and Classification from Existing CCTV Feed*. Joint Transportation Research Program, 2019

RESEARCH GRANTS

[G-1] **PI**: *Explainable Source-Data Protected Cross-Domain Learning*, Board of Regents RCS, 06-01-2022~05-31-2025, $162,829

[G-2] **PI**: *Behavior Prediction Models for Bicyclist and E-scooter Riders during Safe and Risky Interactions with Vehicles*, Toyota CSRC [Subcontracted from Indiana University], 03-01-2022~08-31-2023, $180,000

[G-3] **PI**: *Automatic Detection of Fractures in X-ray Material Tomography using Weakly-supervised Machine Learning*, Board of Regents (LAMDA Seed-Track1B-08), 01-01-2022~12-31-2022, $39,879

[G-4] **PI**: *Source-Free Knowledge Transfer for Customer Attribute Prediction*, Adobe Gift Funding, 06-01-2021~05-31-2022, $10,000

[G-5] **PI**: *Trustable Knowledge Transfer for Cross-Domain Few-Shot Learning*, COR Research Fellowships [Internal], 06-01-2021~05-31-2022, $10,000

[G-6] **PI**: *Discrepancies in Road-Scene Understandings between ADS and Human to Improve Trust in AI*, Toyota CSRC [Subcontracted from Indiana University], 07-01/2021~02-28-2022, $66,000

[G-7] **Co-PI**: *IUCRC Planning Grant: Tulane: Center for Applied Artificial Intelligence (CAAI)*, NSF-CNS, 03-01-2022~, $19,999

HONORS

Chinese Government Award for Outstanding Self-Financed Students Abroad,	2017
ACM Multimedia Best Paper Candidate,	2017
Travel Award for National Institute of Justice (NIJ) Forensic Science Research & Development Poster Session at the Pittcon 2018 Conference & Expo,	2017
NEU College of Engineering Outstanding Graduate Research Award,	2017
CVPR/FG Doctoral Consortium Travel Award,	2017
Graduate Student Government Travel Award, NEU,	2017/2016/2015

National Institute of Justice (NIJ) Fellowship, 2016
SPIE Lockheed Martin Best Paper Award, 2016
IJCAI/AAAI Student Travel Award, 2016
NSF Student Travel Award (ICDM-14), 2014
ACM MM Student Travel Award, 2014
National Graduate Scholarship (China), 2012
National Inspirational Scholarship (China), 2007

PROFESSIONAL
SERVICES

Associate Editor

- IEEE Transactions on Circuits and Systems for Video Technology, 2022~

- SPIE Journal of Electronic Imaging (JEI), 2019~

- IET Image Processing, 2019~

Guest Editor

- Multimedia Tools and Applications: Special Issue: Transfer Learning for Multimedia Applications

- Spring Nature Computer Science: Special Issue: Recent Developments in Unsupervised Deep Learning

- MDPI Sensors: Special Issue: Advanced Computer Vision Techniques for Autonomous Driving

Program Chair

- IEEE Intelligent Vehicles Symposium (IV) 2022 Workshop on the Prediction of Pedestrian Behaviors for Automated Driving

- CVPR-22 Workshop on Federated Learning for Computer Vision (FedVision)

- CVPR-21 Workshop on Analysis and Modeling of Faces and Gestures (AMFG2021)

- CVPR-19 Workshop on Analysis and Modeling of Faces and Gestures (AMFG2019)

- 3rd International Workshop on Big Data Transfer Learning (BDTL)