

## Kang Zheng, Ph.D.

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Senior Research Scientist  
**PAII Inc.**

### CONTACT INFORMATION

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### EDUCATION

**University of South Carolina**, Columbia, SC, USA  
Ph.D. in Computer Science and Engineering  
Advisor: Song Wang

Aug. 2012 – Aug. 2019

**Harbin Institute of Technology**, Harbin, China  
B.E. in Electrical Engineering

Aug. 2008 – Jul. 2012

### EXPERIENCES

**PAII Inc.**  
Senior Research Scientist

Bethesda, MD, USA  
Aug. 2019 –

**PAII Inc.**  
Research Intern

Bethesda, MD, USA  
Feb. – Jun. 2019

**HERE North America**  
Research Intern

Chicago, IL, USA  
Jul. – Oct. 2017

### RESEARCH INTERESTS

Computer vision, Deep learning  
Medical image analysis

### PUBLICATIONS

- [22] Y. Lu, **K. Zheng**, W. Li, Y. Wang, A. Harrison, C. Lin, S. Wang, J. Xiao, L. Lu, CF. Kuo, S. Miao, “*Contour Transformer Network for One-shot Segmentation of Anatomical Structures*”, IEEE Transactions on Medical Imaging 2020.
- [21] **K. Zheng**, Y. Wang, L. Lu, C. Hsieh, C. Kuo, S. Miao, “*Consistent and Coherent Computer-Aided Knee Osteoarthritis Assessment from Plain Radiographs*”, RSNA 2020.
- [20] W. Li, Y. Lu, **K. Zheng**, H. Liao, C. Lin, J. Luo, CT Cheng, J. Xiao, L. Lu, CF Kuo, S. Miao, “*Structured Landmark Detection via Topology-Adapting Deep Graph Learning*”, ECCV 2020.
- [19] H. Chen, Y. Wang, **K. Zheng**, W. Li, CT Cheng, A. Harrison, J. Xiao, G. Hager, L. Lu, C. Liao, S. Miao, “*Anatomy-Aware Siamese Network: Exploiting Semantic Asymmetry for Accurate Pelvic Fracture Detection*”, ECCV 2020.
- [18] Y. Lu, W. Li, **K. Zheng**, Y. Wang, A. Harrison, C. Lin, J. Xiao, L. Lu, S. Wang, CF. Kuo, S. Miao, “*Learning to Segment Anatomical Structures Accurately from One Exemplar*”, MICCAI 2020.
- [17] H. Yu, **K. Zheng**, J. Fang, H. Guo, S. Wang. “*A New Method and Benchmark for Detecting Co-Saliency within a Single Image*”, IEEE Transactions on Multimedia, 2020.
- [16] Y. Mi, **K. Zheng**, S. Wang. “*Homography Estimation along Short Videos by Recurrent Convolutional Regression Network*”, Mathematical Foundations of Computing, 2020.
- [15] S. Song, H. Yu, Z. Miao, J. Fang, K. Zheng, C. Ma, S. Wang. “*Multi-spectral Salient Object Detection by Adversarial Domain Adaptation*”, In AAAI, 2020.
- [14] D. Guo, Y. Pei, **K. Zheng**, H. Yu, Y. Lu, S. Wang, “*Degraded Image Semantic Segmentation with Dense-Gram Networks*”, IEEE Transactions on Image Processing, 2019.

- [13] H. Guo, **K. Zheng**, X. Fan, H. Yu, S. Wang, “*Visual Attention Consistency under Image Transforms for Multi-Label Image Classification*”, In CVPR, 2019.
- [12] G. Liang, X. Lan, X. Chen, **K. Zheng**, S. Wang, N. Zheng. “*Cross-View Person Identification based on Confidence-Weighted Human Pose Matching*”, IEEE Transactions on Image Processing, 2019.
- [11] Y. Mi, **K. Zheng**, S. Wang, “*Recognizing Actions in Wearable-Camera Videos by Training Classifiers on Fixed-Camera Videos*”, In ICMR, 2018.
- [10] G. Liang, X. Lan, **K. Zheng**, S. Wang, N. Zheng, “*Cross-View Person Identification by Matching Human Poses Estimated with Confidence on Each Body Joint*”, In AAAI, 2018.
- [9] H. Yu, **K. Zheng**, J. Fang, H. Guo, W. Feng, S. Wang, “*Co-Saliency Detection within a Single Image*”, In AAAI, 2018.
- [8] **K. Zheng**, X. Fan, Y. Lin, H. Guo, H. Yu, D. Guo, S. Wang, “*Learning View-Invariant Features for Person Identification in Temporally Synchronized Videos Taken by Wearable Cameras*”, In ICCV, 2017.
- [7] D. Guo, **K. Zheng**, S. Wang, “*Lesion Detection Using T1-Weighted MRI: A New Approach Based on Functional Cortical ROIs*”, In ICIP, 2017.
- [6] **K. Zheng**, H. Guo, X. Fan, H. Yu, S. Wang, “*Identifying Same Persons from Temporally Synchronized Videos Taken by Multiple Wearable Cameras*”, In CVPR Workshop, 2016.
- [5] D. Guo, J. Fridriksson, P. Fillmore, C. Rorden, H. Yu, **K. Zheng**, S. Wang, “*Automated lesion detection on MRI scans using combined unsupervised and supervised methods*”, BMC Medical Imaging, 2015.
- [4] X. Fan, **K. Zheng**, Y. Lin, S. Wang, “*Combining Local Appearance and Holistic View: Dual-Source Deep Neural Networks for Human Pose Estimation*”, In CVPR, 2015.
- [3] D. Salvi, **K. Zheng**, Y. Zhou, S. Wang, “*Distance Transform Based Active Contour Approach for Document Image Rectification*”, In WACV, 2015.
- [2] **K. Zheng\***, Y. Lin\*, Y. Zhou, D. Salvi, X. Fan, D. Guo, Z. Meng, S. Wang, “*Video-based Action Detection using Multiple Wearable Cameras*”, In ECCV Workshop, 2014.
- [1] X. Fan, **K. Zheng**, Y. Zhou, S. Wang, “*Pose Locality Constrained Representation for 3D Human Pose Reconstruction*”, In ECCV, 2014.

PROFESSIONAL  
SERVICES

**Journal Reviewer**

IEEE Transactions on Pattern Analysis and Machine Intelligence  
 IEEE Transactions on Circuits and Systems for Video Technology  
 IEEE Transactions on Image Processing  
 IEEE Transactions on Medical Imaging  
 IEEE Signal Processing Letters  
 Pattern Recognition Letters  
 Computerized Medical Imaging and Graphics

**Conference Reviewer**

MICCAI 2020, 2021  
 CVPR 2021, 2020, 2019  
 ECCV 2020  
 ICCV 2019  
 AAAI 2021, 2020, 2019, 2018  
 IJCAI 2019, 2018  
 ICPR 2020, 2016

**Program Committee**

AAAI 2020, 2019, 2018  
 IJCAI 2018