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Post-Doctoral Fellow
Department of Computer Science and Engineering
Hong Kong University of Science and Technology

Email: z.yan@connect.ust.hk
Phone: +852 6153 1250
Web: http://www.cse.ust.hk/ zyanad/

EDUCATION

Ph.D. Computer Science and Engineering, Hong Kong University of Science and Technology, 2020

M.S. Information Engineering, Huazhong University of Science and Technology, China, 2016

B.S. Information Engineering, Huazhong University of Science and Technology, China, 2013

ACADEMIC APPOINTMENTS

2020.09 - present Hong Kong University of Science and Technology
Postdoctoral Research Fellow, Department of Computer Science and Engineering

RESEARCH AREAS

Deep learning: domain adaptation, federated learning

Medical imaging: retinal vessel segmentation, gland instance segmentation, prostate cancer detection

SELECTED PUBLICATIONS

[Full Publications]

Under Review/Submission

2020 **Z. Yan**, J. Wicaksana, Shichao Li, X. Yang, and K. -T. Cheng. "Cycle^{2}GAN: Weakly Supervised Image-to-Image Translation for Medical Image Data." preparing for *IEEE Transactions on Medical Imaging*.

2020 **Z. Yan**, J. Wicaksana, Shichao Li, and K. -T. Cheng. "Weakly Supervised Domain Adaptation for Tumor Segmentation in Breast Ultrasound Images." preparing for *IEEE Transactions on Medical Imaging*.

2020 Shichao Li, **Z. Yan**, Hongyang Li, and K. -T. Cheng. "Exploring Intermediate Representation for Monocular Vehicle Pose Estimation." submitted to *CVPR*.

Articles in Peer-Reviewed Journals

2020 **Z. Yan**, J. Wicaksana, Z. Wang, X. Yang, and K. -T. Cheng. "Variation-Aware Federated Learning with Multi-Source Decentralized Medical Image Data." *IEEE Journal of Biomedical and Health Informatics*, in press.

2020 **Z. Yan**, X. Yang, and K. -T. Cheng. "Enabling a Single Deep Learning Model for Accurate Gland Instance Segmentation: A Shape-Aware Adversarial Learning Framework." *IEEE Transactions on Medical Imaging*, 39 (6), 2176-2189, 2020.

2019 **Z. Yan**, X. Yang, and K. -T. Cheng. "A Three-Stage Deep Learning Model for Accurate Retinal Vessel Segmentation." *IEEE Journal of Biomedical and Health Informatics*, 23 (4), 1427-1436, 2019. **ESI Highly Cited Paper**

2018 **Z. Yan**, X. Yang, and K. -T. Cheng. "Joint Segment-Level and Pixel-Wise Losses for Deep Learning based Retinal Vessel Segmentation." *IEEE Transactions on Biomedical Engineering*, 65 (9), 1912-1923, 2018.

2018 **Z. Yan**, X. Yang, and K. -T. Cheng. "A Skeletal Similarity Metric for Quality Evaluation of Vessel Segmentation." *IEEE Transactions on Medical Imaging*, 37 (4), 1045-1057, 2018.

2018 K. Ikeuchi, Z. Ma, **Z. Yan**, S. Kudoh, and M. Nakamura. "Describing Upper Body Motions based on the Labanotation for Learning-from-Observation Robots." *International Journal of Computer Vision*, 126 (12), 1415-1429, 2018.

Conference Proceedings

2018 **Z. Yan**, X. Yang, and K. -T. Cheng. "A Deep Model with Shape-Preserving Loss for Gland Instance Segmentation." *International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI)*, pp. 138-146, 2018.

AWARDS AND HONORS

2015 Top 10% Paper Award, IEEE MMSP

2015 Travel Award, IEEE ICIP

SERVICE

Academic Journal Peer Review

IEEE Journal of Biomedical and Health Informatics

IEEE Transactions on Medical Imaging

IEEE Transactions on Cybernetics

Academic Conference Peer Review

MICCAI

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