Yongcheng Liu | Asst. Prof.

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National Laboratory of Pattern Recognition, CASIA, Beijing, China

Education

Ph.D in Pattern Recognition and Intelligent system
School of Artificial Intelligence, University of Chinese Academy of Sciences, Beijing, China   2015–2020

B.E in Control Technology and Instrument
School of Automation, Huazhong University of Science and Technology, Wuhan, China   2011–2015

Research Interests

3D point cloud processing, image segmentation, multi-label image recognition and object detection driven by deep learning.

Experience

Sensetime - Research Intern in Computer Vision.. 2017.11–2018.06

Publications

CONFERENCE

[C-1]: **Yongcheng Liu**, Bin Fan, Shiming Xiang, and Chunhong Pan. Relation-Shape Convolutional Neural Network for Point Cloud Analysis. In *IEEE Conference on Computer Vision and Pattern Recognition* (**CVPR**), **Oral Presentation & Best Paper Finalist**, pages 8895-8904, 2019.

[C-2]: **Yongcheng Liu**, Bin Fan, Gaofeng Meng, Jiwen Lu, Shiming Xiang, and Chunhong Pan. DensePoint: Learning Densely Contextual Representation for Efficient Point Cloud Processing. In *IEEE International Conference on Computer Vision* (**ICCV**), pages 1-10, 2019.

[C-3]: **Yongcheng Liu**, Lu Sheng, Jing Shao, Junjie Yan, Shiming Xiang, and Chunhong Pan. Multi-Label Image Classification via Knowledge Distillation from Weakly-Supervised Detection. In *ACM International Conference on Multimedia* (**ACM MM**), pages 700-708, 2018.

[C-4]: **Yongcheng Liu**, Bin Fan, Lingfeng Wang, Jun Bai, Shiming Xiang, and Chunhong Pan. Context-Aware Cascade Network for Semantic Labeling in VHR image. In *IEEE International Conference on Image Processing* (**ICIP**), **Oral Presentation**, pages 575-579, 2017.

[C-5]: Jianbo Liu, **Yongcheng Liu**, Ying Wang, Veronique Prinet, Shiming Xiang, and Chunhong Pan. Decoupled Representation Learning for Skeleton-Based Gesture Recognition. In *IEEE Conference on Computer Vision and Pattern Recognition* (**CVPR**), pages 5751-5760, 2020.

JOURNAL

[J-1]: **Yongcheng Liu**, Bin Fan, Lingfeng Wang, Jun Bai, Shiming Xiang, and Chunhong Pan. Semantic Labeling in Very High Resolution Images via A Self-Cascaded Convolutional Neural Network. *ISPRS Journal of Photogrammetry and Remote Sensing.* (**IF = 6.942, JCR Q1**), vol.145, pp.78-95, Nov. 2018.

Awards

Best Paper Finalist, CVPR 2019
National Scholarship, Ph.D, 2019
National Scholarship, B.E, 2014

Technical Skills

○ Computer Languages: MATLAB, Python, C/C++, LaTeX
○ Deep Learning Platforms: PyTorch, Caffe

- Operating Systems: Linux/Unix, Windows
- Productivity Tools: Matlab, PyCharm, Microsoft Visual Studio, Vim

Professional Services

- Journal reviewer of
  - IEEE Transactions on Image Processing (TIP)
  - ISPRS Journal of Photogrammetry and Remote Sensing
  - Neurocomputing
  - IET Image Processing
  - ACM Transactions on Multimedia Computing, Communications and Applications (TOMM)
- Conference reviewer of
  - IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020
  - Asian Conference on Computer Vision (ACCV), 2020
  - Winter Conference on Applications of Computer Vision (WACV), 2021