WENTAO BAO

Luoyu Rd. No. 129 ⋄ Wuhan, Hubei, P. R. China, 430079
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EDUCATION

Wuhan University *Sep. 2016 - June 2019*
Master's Degree from School of Remote Sensing & Information Engineering
Major in Photogrammetry & Remote Sensing
Overall GPA: 3.75/4.00

Wuhan University *Sep. 2012 - June 2016*
Bachelor's Degree from School of Remote Sensing & Information Engineering
Major in Remote Sensing Science & Technology
Overall GPA: 3.77/4.00

PUBLICATION

Wentao Bao, Bin Xu, Zhenzhong Chen. MonoFENet: Monocular 3D Object Detection with Feature Enhancement Networks, *IEEE Transactions on Image Processing* (**TIP**), under review, 2019.

Wentao Bao, Zhenzhong Chen. Human Scanpath Prediction based on Deep Convolutional Saccadic Model. **Neurocomputing**, under review, 2018.

Daiqin Yang, **Wentao Bao**. Group Lasso based Band Selection for Hyperspectral Image Classification. *IEEE Geoscience and Remote Sensing Letters* (**GRSL**), vol. 14, no. 12, pp. 2438-2442, Nov. 2017.

Zhenzhong Chen, Weihang Liao, Bin Xu, Hongyi Liu, Qisheng Li, He Li, Chao Xiao, Hang Zhang, Yiming Li, **Wentao Bao**, Daiqin Yang. Object Tracking over a Multiple-Camera Network. *IEEE International Conference on Multimedia Big Data* (**BigMM**), Apr. 2015.

Jiangping Chen, **Wentao Bao**, Yaqi Liu. Self-adaption Indoor Parking Navigation and Automatic Parking System and Method based on Bluetooth Low Energy (BLE), **China Invention Patent**, Application No. CN201710791726.5, Publication No. CN107605219A, Publication Date 2018.01.19.

RESEARCH EXPERIENCE

3D Object Detection for Autonomous Driving Mar. 2019 - May 2019
Graduate Researcher, with Prof. Zhenzhong Chen *Lab. of IIP, WHU*

· Detect the 2D and 3D objects with a single monocular image for the autonomous driving.
· A feature enhancement network is proposed to improve the 3D localization capability of CNN-based features from 2D object detector and has achieved state-of-the-art performance on KITTI benchmark.

Human Scanpath Prediction for Attention Modelling Sep. 2017 - Mar. 2018
Graduate Researcher, with Prof. Zhenzhong Chen *Lab. of IIP, WHU*

· Predict the human scanpath which reveals the dynamic visual attention and its shift.
· Proposed a deep convolutional saccadic model to simulate the inhibition of return (IOR) process considering on both temporal and spatial association with image content.

Style Harmonization for MODIS Satellite Image Mosaicking Feb. 2017 - Aug. 2017
Graduate Researcher, with Prof. Zhenzhong Chen *Lab. of IIP, WHU*

· Mosaic hundreds of satellite image tiles into a style-consistent world satellite map by considering on the heterogeneous data quality and acquisition time.

· Proposed a GAN-based style transfer model considering on global colorimetric harmonization and local texture consistency of multiple satellite image tiles.

Band Selection for Dimension Reduction and HSI Classification Sept. 2016 - May. 2017
Graduate Researcher, with Prof. Daiqin Yang *Lab. of IIP, WHU*

· Dimension reduction and pixel-wise classification for hyperspectral satellite images (HSI).
· Proposed a group lasso based band selection (GLBS) model which is optimized with the group lasso regularization and multinomial classification simultaneously.

Pedestrian Detection and Tracking with Surveillance Video July 2015 - Aug. 2016
Undergraduate Intern, with Prof. Zhenzhong Chen *Lab. of IIP, WHU*

· Detect and track the pedestrian objects which appear in the surveillance videos.
· Improved the performance of the Faster R-CNN for pedestrian detection and the Spatio-Temporal Context (STC) learning for pedestrian tracking.

COMPETITION EXPERIENCES

1st Prize, **Core Member**, Salient360! Visual Attention Modeling for 360° Content. July 2018

3rd Prize, **Team Leader**, The 4th National Graduate Contest on Smart-City. Aug. 2017

Bronze Award, **Team Leader**, The 2nd China "Internet Plus" Competition (Hubei). Dec. 2016

2nd Prize, **Core Member**, The 3rd National Graduate Contest on Smart-City. Aug. 2016

1st Prize, **Core Member**, BigMM 2015 Challenge, Multiple-Camera Object Tracking. Apr. 2015

3rd Prize, **Team Leader**, The 14th National "Challenge Cup" on Smart-City Track. July 2015

3rd Prize, **Core Member**, The 14th National "SuperMap Cup" on GIS Contest. Dec. 2015

Meritorious Winner, **Core Member**, Mathematical Contest in Modeling (MCM). Feb. 2015

2nd Prize, **Team Leader**, The 13th National "SuperMap Cup" on GIS Contest. Dec. 2014

SELECTED HONORS

Excellent Graduated Student, Wuhan University. (top 5%) May, 2019.

China National Scholarship for graduate students, Oct. 2018.

The First-class Academic Scholarship, Wuhan University. (top 10%) Oct. 2017 & 2018.

Outstanding Postgraduate Student, Wuhan University. (top 10%) Dec. 2017 & 2018.

Excellent Graduate Freshman Scholarship, Wuhan University. (top 10%) Oct. 2016

Advanced Individual, Wuhan University. Jan. 2016

SKILLS

Programing Languages	Python, C/C++, Matlab, Java
Deep Learning Libraries	TensorFlow, Caffe, MXNet, PyTorch, Keras
Other Skills	Latex, Git, Vim

RESEARCH INTERESTS

Computer Vision, Video Analytics, Image Processing, including:

· 2D/3D Object Detection, Action Recognition/Prediction, Depth Estimation, Point Cloud Processing.
· Visual Attention Modeling, Remote Sensing Image Processing.