# WENTAO BAO

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https://cogito2012.github.io/homepage

#### **EDUCATION**

Rochester Institute of Technology, Rochester, NY, USA

Sept. 2019 - Present

Ph.D. in Golisano College of Computing & Information Sciences

Advisors: Prof. Yu Kong and Prof. Qi Yu

Wuhan University, Wuhan, China

Sept. 2016 - June 2019

M.E. in School of Remote Sensing & Information Engineering

Advisor: Prof. Zhenzhong Chen and Prof. Daiqin Yang

Overall GPA: 3.75/4.0

Wuhan University, Wuhan, China

Sept. 2012 - June 2016

B.S. in School of Remote Sensing & Information Engineering

Overall GPA: 3.72/4.0

#### RESEARCH INTERESTS

• Computer Vision: Video Activity Prediction, Open Set Recognition, 2D/3D Object Detection.

- Machine Learning: Uncertainty Estimation, Reinforcement Learning, Bayesian Deep Learning, Multiple Instance Learning, Graph Neural Networks.
- Computational Visual Perception: Visual Saliency/Scanpath Prediction.
- Remote Sensing: Satellite/Aerial Image Analysis.

#### SELECTED PUBLICATIONS

- 1. <u>Wentao Bao</u>, Qi Yu, Yu Kong. Evidential Deep Learning for Open Set Action Recognition. International Conference on Computer Vision (ICCV), 2021 (Oral).
- 2. <u>Wentao Bao</u>, Qi Yu, Yu Kong. DRIVE: Deep Reinforced Accident Anticipation with Visual Explanation. International Conference on Computer Vision (ICCV), 2021.
- 3. <u>Wentao Bao</u>, Qi Yu, Yu Kong. Uncertainty-based Traffic Accident Anticipation with Spatio-Temporal Relational Learning. 28th ACM International Conference on Multimedia (MM), 2020.
- 4. Junwen Chen, <u>Wentao Bao</u>, Yu Kong. Activity-driven Weakly-Supervised Spatio-Temporal Grounding from Untrimmed Videos. 28th ACM International Conference on Multimedia (MM), 2020.
- 5. Junwen Chen, <u>Wentao Bao</u>, Yu Kong. Group Activity Prediction with Sequential Relational Anticipation Model. European Conference on Computer Vision (**ECCV**), 2020.
- 6. <u>Wentao Bao</u>, Qi Yu, Yu Kong. Object-Aware Centroid Voting for Monocular 3D Object Detection. IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), 2020.
- 7. Hanbin Hong, <u>Wentao Bao</u>, Yuan Hong, Yu Kong. Privacy Attributes-aware Message Passing Neural Network for Visual Privacy Attributes Classification. International Conference on Pattern Recognition (ICPR), 2020.
- 8. <u>Wentao Bao</u>, Zhenzhong Chen. Human Scanpath Prediction based on Deep Convolutional Saccadic Model. **Neurocomputing**, vol. 404, pp. 154-164, Mar. 2020. (IF: 4.438)

- 9. Wentao Bao, Bin Xu, Zhenzhong Chen. MonoFENet: Monocular 3D Object Detection with Feature Enhancement Networks. *IEEE Transactions on Image Processing* (**TIP**), vol. 29, pp. 2753-2765, Nov. 2019. (IF: 9.340)
- 10. Daiqin Yang, <u>Wentao Bao</u>. 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. (IF: 3.833)

#### WORK EXPERIENCE

1. Ph.D. intern at Apple, 3D Vision Team at Apple Maps, CA USA (Remote), June-August, 2021.

#### **COMPETITIONS**

| 1st Prize, Core Member, Salient360! Visual Attention Modeling for 360° Content.               | July 2018 |
|---|-----------|
| <b>3rd</b> Prize, <b>Team Leader</b> , 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 |
| <b>3rd</b> Prize, <b>Team Leader</b> , The 14th National "Challenge Cup" on Smart-City Track. | July 2015 |
| <b>3rd</b> Prize, <b>Core Member</b> , 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

| Academic Innovation Award for Postgraduate Student, Wuhan University.   | Dec. 2020.        |
|---|-------------------|
| 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         |

## TECH SKILLS

| DL/CV Tools          | PyTorch, TensorFlow, Keras, Caffe, MXNet, OpenAI Gym, OpenCV |
|----------------------|--|
| Programing Languages | Python, Java, C/C++, MATLAB, Android, Linux Shell            |

# ACADEMIC SERVICES

#### Conference Reviewer:

 $\cdot$  ICCV (2021), CVPR (2021), ICRA (2021), ACM MM (2021 & 2020 & 2019), ICWS (2021), MFI (2020).

### Journal Reviewer:

· IEEE Transactions on Image Processing (TIP).

- · IEEE Robotics and Automation Letters (RA-L).
- · Journal of Visual Communication and Image Representation (JVCI, Elsevier).
- · Information Sciences (Elsevier).
- · Journal of Measurement (Elsevier).
- · Multimedia System Journal (MMSJ, Springer).
- $\cdot$  The Computer Journal (Oxford Academic).

# ${\bf Member ships:}$

- $\cdot$  IEEE Student Member
- $\cdot$  ACM Student Member.

# Volunteers:

 $\cdot$  34th AAAI Conference on Artificial Intelligence (AAAI-20), Feb. 7-12, 2020, New York, USA.