

Dayan Guan

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Research Interest

Artificial intelligence, scene understanding, unsupervised learning, deep learning, autonomous driving, infrared technology.

Education

Zhejiang University, Hangzhou, China

Sep 2014 — Sep 2019

- ★ **Ph.D** in Engineering
- ★ Supervisor: Jiangxin Yang, Yanpeng Cao, and Yanlong Cao
- ★ Dissertation: Research on Pedestrian Detection Methods via Fusing Visible and Long-wave Infrared Images

Central South University, Hangzhou, China

Sep 2010 — Jun 2014

- ★ **Bachelor** in Engineering

Research Appointments

Nanyang Technological University, Singapore

Since Nov 2019

- ★ **Research Fellow**, School of Computer Science and Engineering
- ★ Supervisor: Assistant Professor Shijian Lu

Rigorously Refereed Publications (Note: * indicates the corresponding author.)

1. **Dayan Guan**, Jiaxing Huang, Aoran Xiao, Shijian Lu*. "Domain adaptive video segmentation via temporal consistency regularization." ICCV, 2021. (**CCF-A**)
2. **Dayan Guan**, Jiaxing Huang, Shijian Lu*, Aoran Xiao. "Scale variance minimization for unsupervised domain adaptation in image segmentation." Pattern Recognition, 2021. (**IF = 7.740**)
3. **Dayan Guan**, Jiaxing Huang, Aoran Xiao, Shijian Lu*. Uncertainty-Aware Unsupervised Domain Adaptation in Object Detection. IEEE Transactions on Multimedia, 2021. (**IF = 6.513**)

4. **Dayan Guan**, Yanpeng Cao*, Jiangxin Yang, Yanlong Cao, and Michael Ying Yang. "Fusion of multispectral data through illumination-aware deep neural networks for pedestrian detection." Information Fusion, 2019. **(IF: 12.975)**
5. **Dayan Guan**, Yanpeng Cao*, Jiangxin Yang, Yanlong Cao, and Christel-Loic Tisse. "Exploiting fusion architectures for multispectral pedestrian detection and segmentation." Applied Optics, 2018. **(IF: 1.961, Editors' Pick)**
6. **Dayan Guan**, Xing Luo, Yanpeng Cao, Jiangxin Yang, Yanlong Cao, George Vosselman, and Michael Ying Yang, "Unsupervised Domain Adaptation for Multispectral Pedestrian Detection." International Conference on Computer Vision and Pattern Recognition Workshops, 2019.
7. Yanpeng Cao, **Dayan Guan**, Weilin Huang, Jiangxin Yang, Yanlong Cao, and Yu Qiao*. "Pedestrian detection with unsupervised multispectral feature learning using deep neural networks." Information Fusion, 2019. **(IF: 12.975)** [*The first author is my doctoral supervisor*]
8. Yanpeng Cao, **Dayan Guan**, Yulun Wu, Jiangxin Yang*, Yanlong Cao, Michael Ying Yang. "Box-level segmentation supervised deep neural networks for accurate and real-time multispectral pedestrian detection." ISPRS Journal of Photogrammetry and Remote Sensing, 2019. **(IF: 8.979)** [*The first author is my doctoral supervisor*]
9. Jiaxing Huang, **Dayan Guan**, Aoran Xiao, Shijian Lu*. "Model adaptation: Historical contrastive learning for unsupervised domain adaptation without source data." NeurIPS, 2021. **(CCF-A)**
10. Jiaxing Huang, **Dayan Guan**, Aoran Xiao, Shijian Lu*. "RDA: Robust Domain Adaptation via Fourier Adversarial Attacking." ICCV, 2021. **(CCF-A)**
11. Jiaxing Huang, **Dayan Guan**, Aoran Xiao, Shijian Lu*, "Cross-View Regularization for Domain Adaptive Panoptic Segmentation." CVPR, 2021. **(CCF-A)**
12. Jiaxing Huang, **Dayan Guan**, Aoran Xiao, Shijian Lu*. "FSDR: Frequency Space Domain Randomization for Domain Generalization". CVPR, 2021. **(CCF-A)**

Professional Service

- ★ Reviewer of CVPR, ICCV, IEEE TIP, IEEE TMM, IEEE TCSVT, Pattern Recognition, ISPRS Journal, and etc.

Teaching

- ★ 2017 Autumn: Digital Signal Processing (Tutorial), Zhejiang University
- ★ 2018 Summer: Numerical Analysis for Engineers (Tutorial), Zhejiang University

Awards

- ★ Excellent Postgraduate Award in Zhejiang University
- ★ Outstanding Graduate Award in Central South University