# Wei Liu, Visiting Scholar

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#### **Research interests**

### **Computer vision and machine learning**

My current research mainly focuses on vehicle fine-grained recognition and vehicle reidentification. Given a vehicle image, the goal of vehicle fine-grained recognition is to identify the subtype of the vehicle. Vehicle re-identification aims to re-identify the images of a given query vehicle from a large gallery taking from multiple non-overlapping cameras. I hope my research can promote the development of intelligent transportation systems.

### **Employment History**

2015.06 – 2018.11 Assistant Professor, East China Jiaotong University.

2018.12 – .... Associate Professor, East China Jiaotong University.

### **Education**

- Ph.D., Cognitive Science and Technology, Xiamen University, 2015.
- M.S., Applied Mathematics, Jimei University, 2012.
- B.S., Information and Computing Science, Nanchang university, 2009.

### **Publications**

- Liu, W., Luo, Z., & Li, S. (2018). Improving deep ensemble vehicle classification by using selected adversarial samples. Knowledge-Based Systems, 160, 167–175.
- **Liu, W.**, Zhang, M., Luo, Z., & Cai, Y. (2017). An ensemble deep learning method for vehicle type classification on visual traffic surveillance sensors. IEEE Access, 5, 24417–24425.
- **Liu, W.**, Li, S., Cao, D., Su, S., & Ji, R. (2016). Detection based object labeling of 3d point cloud for indoor scenes. Neurocomputing, 174, 1101–1106.
- **Liu, W.**, Li, S., Lin, X., Wu, Y., & Ji, R. (2016). Spectral–spatial co-clustering of hyperspectral image data based on bipartite graph. Multimedia Systems, 22(3), 355–366.
- **Liu, W**., Cai, Y., Zhang, M., Li, H., & Gu, H. (2016). Scene background estimation based on temporal median filter with gaussian filtering. In 2016 23rd international conference on pattern recognition (icpr) (pp. 132–136).
- **Liu, W.**, Ji, R., & Li, S. (2015). Towards 3d object detection with bimodal deep Boltzmann machines over rgbd imagery. In Proceedings of the ieee conference on computer vision and pattern recognition(cvpr) (pp. 3013–3021). IEEE.
- **Liu, W.**, Li, S., Zhang, M., Wu, Y., Su, S.-z., & Ji, R. (2013). Spectral-spatial classification of hyperspectral imagery based on random forests. In Proceedings of the fifth international conference on internet multimedia computing and service (pp. 163–168). ACM.