# Chen-Lin Zhang

# Curriculum Vitae

## Research Interests

My research interests include: Computer Vision and Deep Learning. Currently, I am focusing on video related tasks:

- Resource constrained computer vision tasks;
- Video related vision tasks;

## Education

- **Ph.D.** in Computer Science and Technology 2016.09-2021.06 (expected) Department of Computer Science and Technology, Nanjing University
  - Supervisor: Prof. Jianxin Wu
- Visiting Scholar in Computer Science 2019.12-2020.12
  - Department of Computer Science, University of Wisconsin-Madison
  - Supervisor: Prof. Yin Li
- **B.Sc.** in Computer Science and Technology 2012.09-2016.07 Department of Computer Science and Technology, Nanjing University

# Publications

Google Scholar: https://scholar.google.com/citations?user=e-RfnkMAAAAJ&hl=en '\*' represents that authors contribute equally to this work.

#### Journal Articles:

- 1. <u>Chen-Lin Zhang</u> and Jianxin Wu. Improving CNN Linear Layers with Power Mean Non-Linearity. Pattern Recognition, 2019, 89: 12-21.
- 2. \*Xiu-Shen Wei, \*Chen-Lin Zhang, Jianxin Wu, Chunhua Shen and Zhi-Hua Zhou. Unsupervised Object Discovery and Co-Localization by Deep Descriptor Transformation. Pattern Recognition, 2019, 88: 113-126.
- 3. \*Xiu-Shen Wei, \*Chen-Lin Zhang, Hao Zhang and Jianxin Wu. Deep Bimodal Regression of Personality Traits from Short Video Sequences. IEEE Transactions on Affective Computing (TAC), 2018, 9(3): 303-315.

4. Guo-Bing Zhou, Jianxin Wu, <u>Chen-Lin Zhang</u> and Zhi-Hua Zhou. Minimal Gated Unit for Recurrent Neural Networks. International Journal of Automation and Computing, 2016, 13(3): 226-234.

### Conference Papers:

- 5. Ran Xu, <u>Chen-Lin Zhang</u>, Pengcheng Wang, Jayoung Lee, Subrata Mitra, Somali Chaterji, Yin Li, Saurabh Bagchi. ApproxDet: Content and Contention-Aware Approximate Object Detection for Mobiles. In Proceedings of the 18th ACM Conference on Embedded Networked Sensor Systems (SenSys 2020).
- Chen-Lin Zhang, Yun-Hao Cao and Jianxin Wu. Rethinking the Route Towards Weakly Supervised Object Localization. In Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2020), Seattle, WA (Virtual), USA. pp. 13460-13469.
- \*Xiu-Shen Wei, \*Chen-Lin Zhang, Linqiao Liu, Jianxin Wu and Chunhua Shen. Coarse-to-fine: A RNN-based Hierarchical Attention Model for Vehicle Re-identification. In Proceedings of the 14th Asian Conference on Computer Vision (ACCV 2018), Perth, Australia, 575-591.
- 8. <u>Chen-Lin Zhang</u>, Jian-Hao Luo, Xiu-Shen Wei and Jianxin Wu. In Defense of Fully Connected Layers in Visual Representation Transfer. In Proceedings of the 18th Pacific-Rim Conference on Multimedia (PCM 2017), Harbin, China, 2017, LNCS 10736. pp, 807-817.
- \*Xiu-Shen Wei, \*Chen-Lin Zhang, Yao Li, Chen-Wei Xie, Jianxin Wu, Chunhua Shen and Zhi-Hua Zhou. Deep Descriptor Transforming for Image Co-Localization. In Proceedings of the 26th International Joint Conference on Artificial Intelligence (IJCAI 2017), Melbourne, Australia, pp. 3048-3054.
- 10. <u>Chen-Lin Zhang</u>, Hao Zhang, Xiu-Shen Wei and Jianxin Wu. Deep Bimodal Regression for Apparent Personality Analysis. In Proceedings of the 14th European Conference on Computer Vision (ECCV16) Workshops, Amsterdam, The Netherlands, 2016, LNCS 9913, pp. 311-324.

# Research Projects (Except Publication)

- Weakly Supervised Object Localization and Detection
  We develop a new paradigm shift for both WSOL and WSOD tasks
  A paper has been published in CVPR 2020, More works are in progress
- Long-Term Action Localization 2019.12-present

- We first explore a new representation for actions, and develop a model which can handle the annotation ambiguity in action localization tasks
- Contention-Aware Video Object Detection Methods on Mobile Devices 2020.4-present We develop a model which can adaptively respond to contention and content changes A paper has been published in Sensys 2020, More works are in progress

## Professional Activities

#### Journal Reviewer:

- IEEE Transactions on Dependable and Secure Computing (TDSC)
- IEEE Transactions on Affective Computing (TAC)
- IEEE Communication Letters
- Elsevier Journal of Pattern Recognition (PR)
- ACM Transactions on Knowledge Discovery from Data (TKDD)

#### Conference Reviewer:

- o IJCAI 2021
- o CVPR 2021
- ECCV 2020
- ICPR 2020
- o AAAI 2019

# Awards & Honors

- A gold medal (the 6th place of all 2,293 teams) in the competition of Nature Conservancy
  Fisheries Monitoring (Kaggle)
- Presidential Special Scholarship for first year Ph.D. Student in Nanjing University 2016.09
- Win the 1st place in Apparent Personality Analysis (in association with ECCV 2016) as Team Leader. 2016.08

# Teaching Assistants

- Programming Basics. (for undergraduate students. Autumn, 2018)
- Pattern Recognition. (for undergraduate and graduated students. Spring, 2018)