ZITIAN CHEN

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EDUCATION

- **University of Massachusetts Amherst**, 09/2019 - present
  Ph.D. in Computer Science, advised by Erik G. Learned-Miller
- **Fudan University**, 09/2015 - 06/2019
  B.S. in Computer Science

RESEARCH INTEREST

I believe that techniques designed to alleviate or circumvent the problems of **label scarcity** will represent some of the biggest contributions to AI and computer vision in the next 10 years, and these methods constitute the primary focus of my work, including unsupervised learning, self-supervised learning, semi-supervised learning, few-shot learning, transfer learning and weakly supervised learning. I am also broadly interested in the other areas of computer vision.

PUBLICATION

- **Are base-class labels necessary for few-shot learning? Self-Supervised Features vs. Supervised Features.** [Paper]
  Zitian Chen, Subhransu Maji, and Erik G. Learned-Miller.
  In submission.
- **Cross-Supervised Object Detection.** [Paper]
  Zitian Chen, Zhiqiang Shen, Jiahui Yu, and Erik G. Learned-Miller.
  In submission.
- **Image deformation meta-networks for one-shot learning.** [Paper]
  Zitian Chen, Yanwei Fu, Yu-Xiong Wang, Lin Ma, Wei Liu, and Martial Hebert.
  In Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019. (Oral)
- **Image block augmentation for one-shot learning.** [Paper]
  Zitian Chen, Yanwei Fu, Kaiyu Chen, and Yu-Gang Jiang.
  In Association for the Advancement of Artificial Intelligence (AAAI), 2019.
- **Multi-level semantic feature augmentation for one-shot learning.** [Paper]
  Zitian Chen, Yanwei Fu, Yinda Zhang, Yu-Gang Jiang, Xiangyang Xue, and Leonid Sigal.
  In IEEE Transactions on Image Processing (TIP).
- **Environment Upgrade Reinforcement Learning for Non-differentiable Multi-stage Pipelines.** [Paper]
  Shuqin Xie, **Zitian Chen**, Chao Xu, Cewu Lu
  In Proceedings of the IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018. (Spotlight)
- **Learning to score the figure skating sports videos.** [Paper]
  Chengming Xu, Yanwei Fu, Bing Zhang, **Zitian Chen**, Yu-Gang Jiang, Xiangyang Xue.
  In IEEE Transactions on Circuits and Systems for Video Technology (TCSVT).

ACADEMIC ACTIVITIES

- Reviewers for NeurIPS 2020, ECCV 2020, CVPR 2020, AAAI 2020, ICCV 2019

COMPETITION AWARDS

- Gold Medal at ACM-ICPC (International Collegiate Programming Contest) 2015 Beijing Regional. (4/200)
- Gold Medal at ACM-ICPC (International Collegiate Programming Contest) 2016 Qingdao Regional. (14/200)

OTHER SKILLS

- Experienced in Python (PyTorch); familiar with C++.