# **Suncheng Xiang**

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https://JeremyXSC.github.io/

### RESEARCH INTERESTS

### **Machine Learning and Computer Vision**

Image Retrieval, Person Re-Identification, Representation Learning Domain Adaptation, Image Generation, Generative Adversarial Network

#### **EDUCATION**

Shanghai Jiao Tong University

Ph.D in Computer Science and Technology

Sep 2017 – Present

Shanghai, China

**National University of Defense Technology** 

M.S in Software Engineering

Changsha, China Sep 2014 – Jul 2017

Changsha University of Science & Technology

B.S in Electrical Engineering and Automation

Changsha, China Sep 2010 – Jul 2014

#### **PUBLICATIONS**

[1] Deep Unsupervised Progressive Learning for Distant Domain Adaptation IEEE International Conference on Tools with Artificial Intelligence (ICTAI), 2019. (Oral) Suncheng Xiang, Yuzhuo Fu, Ting Liu

[2] *Unsupervised Person Re-Identification by Hierarchical Cluster and Domain Transfer* Multimedia Tools and Applications (**MTA**), 2020.

Suncheng Xiang, Yuzhuo Fu, Mingye Xie, Zefang Yu, Ting Liu

[3] Unsupervised Domain Adaptation Through Synthesis for Person Re-Identification IEEE International Conference on Multimedia and Expo (ICME), 2020.

Suncheng Xiang, Yuzhuo Fu, Guanjie You, Ting Liu

[4] Progressive Learning with Style Transfer for Distant Domain Adaptation IET Image Processing (**IET-IPR**), 2020.

Suncheng Xiang, Yuzhuo Fu, Ting Liu

[5] Multi-level Feature Learning with Attention for Person Re-Identification Multimedia Tools and Applications (MTA), 2020.

Suncheng Xiang, Yuzhuo Fu, Hao Chen, Wei Ran, Ting Liu

#### **PATENTS**

A Method, Equipment and Storage Medium for Re-Identification of Inland Water Vessels Based on Transfer Learning

CN111259812A,2020-06-09

Yuzhuo Fu, Ting Liu, Suncheng Xiang

### **AWARDS**

- Leo KoGuan Scholarship,, SJTU, 2019-2020
- Merit Student, SJTU, 2018-2019

- First-class Academic Scholarship, NUDT, 2016-2017
- Outstanding Student, NUDT, 2014-2015
- Third-class Academic Scholarship, Outstanding League Cadres, CSUST, 2012-2013
- First-class Academic Scholarship, Merit Student, Model Student of Academic Records, CSUST, 2011-2012
- Third-class Academic Scholarship, Excellent League Member, CSUST, 2010-2011

#### PROFESSIONAL ACTIVITIES

### **Journal Review**

**IET Image Processing** 

**IEEE Access** 

Signal Processing: Image Communication

# **Program Committees**

Session Chair of ICTAI 2019

#### **SKILLS**

Programming: Python, MATLAB, C/C++ Deep Learning: Pytorch, TensorFlow, Caffe

### **PROJECTS**

# **Unsupervised Domain Adaptation for Person Re-Identification**

- The purpose of this project is to learn a discriminative and robust model for cross-domain person reidentification, under both open set and closed set scenarios. This problem is important since manually collecting a large-scale dataset is time-consuming and labor-intensive.
- We propose new **part alignment, style transfer and pseudo label annotation** methods to further boost the performance of cross-domain re-identification. Besides, a large-scale synthetic dataset is constructed for generalizable re-identification task, which provides fine-grained and accurately configurable annotations.

# Learning Behavior Analysis in Classroom Based on Deep Learning

- Classroom behavior analysis is significant for automatic evaluation of the classroom teaching.
- This project uses deep learning algorithms to recognize students' behavior in the classroom, and obtains meaningful statistical results for classroom teaching analysis. On this basis, several key technical indicators on the quality of classroom listening are constructed.

# Research on Key Technologies of Accurate and Fast Structure-level Soft Error Quantification

- It is very important to analyze the structure-level soft errors of the chip.
- This project constructs a set of highly reliable quantitative evaluation schemes through soft error faults
  at different algorithm levels, which can improve the reliability and robustness of the algorithm to the
  greatest extent.

#### **Courses & TEACHING**

#### Ph.D. Courses Taken:

Advanced Computer Architecture Neural Network and Machine Learning Image Processing and Machine Vision

# **Teaching Assistant:**

Digital Integrated Circuit (Lead TA, Spring 2018) Operating System (Lead TA, Autumn 2018) Digital Integrated Circuit (Lead TA, Autumn 2020)