# SUNCHENG XIANG

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Personal Webpage: 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**, Shanghai, China 2017 - 2022
Ph.D in Computer Science and Technology

**National University of Defense Technology**, Changsha, China 2014 - 2017
M.S in Software Engineering

**Changsha University of Science & Technology**, Changsha, China 2010 - 2014
B.S in Electrical Engineering and Automation

## Preprints

[1]. VTBR: Semantic-based Pretraining for Person Re-Identification
arXiv preprint arXiv:2110.05074, 2021.
**Suncheng Xiang**, Zirui Zhang, Mengyuan Guan, Hao Chen, Binjie Yan, Ting Liu, Yuzhuo Fu

[2]. Less is More: Learning from Synthetic Data with Fine-grained Attributes for Person Re-Identification
arXiv preprint arXiv:2109.10498, 2021.
**Suncheng Xiang**, Guanjie You, Mengyuan Guan, Hao Chen, Feng Wang, Ting Liu, Yuzhuo Fu

[3]. Attribute Analysis with Synthetic Dataset for Person Re-Identification
arXiv preprint arXiv:2006.07139, 2020.
**Suncheng Xiang**, Yuzhuo Fu, Guanjie You, Ting Liu

## Journal Publications

[4]. Learning from Self-Discrepancy via Multiple Co-teaching for Cross-Domain Person Re-Identification
Machine Learning (**ML**), 2021. (**Invited Paper**)
**Suncheng Xiang**, Yuzhuo Fu, Mengyuan Guan, 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

[6]. Progressive Learning with Style Transfer for Distant Domain Adaptation
IET Image Processing (**IET-IPR**), 2020.
**Suncheng Xiang**, Yuzhuo Fu, Ting Liu

[7]. 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

## Conference Publications

[8]. CDTnet: Cross-Domain Transformer based on Attributes for Person Re-Identification
IEEE International Conference on Multimedia and Expo Workshops (**ICMEW**), 2022.
Mengyuan Guan, **Suncheng Xiang**, Ting Liu, Yuzhuo Fu

[9]. Rethinking Illumination for Person Re-Identification: A Unified View
IEEE Conference on Computer Vision and Pattern Recognition Workshops (**CVPRW**), 2022.
**Suncheng Xiang**, Guanjie You, Leqi Li, Mengyuan Guan, Ting Liu, Dahong Qian, Yuzhuo Fu

[10]. Spatial Attention Guided Local Facial Attribute Editing
IEEE International Conference on Multimedia and Expo (**ICME**), 2022.
Mingye Xie, **Suncheng Xiang**, Feng Wang, Ting Liu, Yuzhuo Fu
Acceptance Rate = 29%

[11]. Learning from Self-Discrepancy via Multiple Co-teaching for Cross-Domain Person Re-Identification
International Joint Conference on Artificial Intelligence WSRL Workshop (**IJCAIW**), 2021.
**Suncheng Xiang**, Yuzhuo Fu, Mengyuan Guan, Ting Liu

[12]. Attention based Facial Expression Manipulation
IEEE International Conference on Multimedia and Expo Workshops (**ICMEW**), 2021.
Feng Wang, **Suncheng Xiang**, Ting Liu, Yuzhuo Fu

[13]. Taking a Closer Look at Synthesis: Fine-grained Attribute Analysis for Person Re-Identification
IEEE International Conference on Acoustics, Speech and Signal Processing (**ICASSP**), 2021.
**Suncheng Xiang**, Yuzhuo Fu, Guanjie You, Ting Liu
Acceptance Rate = 1734 / 3610 = 48%

[14]. 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
Acceptance Rate = 241 / 834 = 29%

[15]. 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
Acceptance Rate = 28%

## Patents

[16]. A Method, Equipment and Storage Medium for Re-Identification of Inland Water Vessels Based on Transfer Learning
National Invention Patent. Patent No: CN202010053647.6
Yuzhuo Fu, Ting Liu, **Suncheng Xiang**

## Awards

- Outstanding Doctoral Graduate, SJTU, 2022
- Leo KoGuan Scholarship, SJTU, 2019 - 2020
- Merit Student, SJTU, 2018-2019
- First-class Academic Scholarship, NUDT, 2016-2017
- Outstanding Student, NUDT, 2015-2016
- 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**

- IEEE Transactions on Image Processing
- IEEE Transactions on Multimedia
- Pattern Recognition
- IET Image Processing
- IEEE Access
- Signal Processing: Image Communication
- Expert Systems with Applications

**Conference Review**

- IWACCE2022

**Program Committees**

- Session Chair of ICTAI 2019

## Skills

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

## Courses & Teaching

**Ph.D. Courses Taken:**

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

**Teaching Assistant:**

- Digital Integrated Circuits, SJTU (Lead TA, Fall 2020)
- Operating System, SJTU (Lead TA, Fall 2018)
- Digital Integrated Circuits, SJTU (Lead TA, Spring 2018)
- Fundamentals of College Computer, NUDT (Lead TA, Fall 2015)

## Invited Talks

- 2022.03: Learning from Synthetic Data with Fine-grained Attributes, Fudan University
- 2021.12: Leveraging Synthetic Data for Person Re-Identification, Hunan University
- 2021.12: Learning from Synthetic Data for Person Re-Identification, Donghua University

## Open Source

Codes and models for my published papers are available on my GitHub:
**https://github.com/JeremyXSC/**

Last updated: May 26, 2022