# **Xiang Zhang**

\$\cup (607) 239-8929 | \sum zxiang4@binghamton.edu | \$\mathref{n}\$ www.xianng.com | in xianng | \$\sum \text{Google Scholar}\$

# Research Interests \_\_\_\_\_

My research interests are focused on the intersection of Computer Vision and Deep Learning, specifically exploring multi-modal learning for human facial analysis, and its applications in various domains such as healthcare, security, education, and entertainment.

I am seeking an internship role where I can utilize my skills, education, and experience to make a meaningful contribution to the field.

# Education \_\_\_\_\_

#### **Binghamton University**

Ph.D. Candidate in Computer Science;

Aug. 2019 - Present

• Advisor: Dr.Lijun Yin

### **Binghamton University**

MASTER OF SCIENCE IN COMPUTER SCIENCE, GPA: 3.81/4.0 Aug. 2017 - May 2019

• Advisor: Dr.Lijun Yin

# **Nanchang Hangkong University**

BACHELOR IN ELECTRONIC SCIENCE AND TECHNOLOGY, GPA: 3.2/4.0 Sep. 2008 - June 2012

# **Publications** \_\_\_\_\_

\* denotes equal contribution

Binghamton, NY

Binghamton, NY

Nanchang, China

- Xiang Zhang, Huiyuan Yang, Taoyue Wang, Xiaotian Li and Lijun Yin. Multimodal Channel-Mixing: Channel and Spatial Masked AutoEncoder on Facial Action Unit Detection. [WACV 2024]
- **Xiang Zhang**, Taoyue Wang, Xiaotian Li, Huiyuan Yang and Lijun Yin. *Weakly-Supervised Text-driven Contrastive Learning for Facial Behavior Understanding*. [ICCV 2023]
- Xiaotian Li, **Xiang Zhang**, Taoyue Wang and Lijun Yin. *Knowledge-Spreader: Learning Facial Action Dynamics from Single Label Clips via Progressive Knowledge Distillation*. [ICCV 2023]
- Xiaotian Li, Taoyue Wang, Geran Zhao, **Xiang Zhang**, Xi Kang and Lijun Yin. *ReactioNet: Learning High-order Facial Behavior from Universal Stimulus-Reaction by Dyadic Relation Reasoning*. [ICCV 2023]
- Xiaotian Li, Zheng Zhang, **Xiang Zhang**, Taoyue Wang, Zhihua Li, Huiyuan Yang, Umur Ciftci, Qiang Ji, Jeffrey Cohn, and Lijun Yin. *Disagreement Matters: Exploring Internal Diversification for Redundant Attention in Generic Facial Action Analysis.*. [Affective Computing 2023]
- **Xiang Zhang** and Lijun Yin. *Multi-Modal Learning for AU Detection Based on Multi-Head Fused Transformers*. [FG 2021]
- Xiaotian Li\*, **Xiang Zhang**\*, Huiyuan Yang, Wenna Duan, Weiying Dai and Lijun Yin. *An EEG-Based Multi-Modal Emotion Database with Both Posed and Authentic Facial Actions for Emotion Analysis*. [FG 2020]

# Research Experiences \_\_\_\_\_

# **Binghamton University GAIC Lab**

Binghamton, NY

#### DATA COLLECTION AND CREATION

Feb. 2018 - Present

- Led the creation and curation of multi-modal human emotion databases, including video, audio, 3D, thermal, and physiological signals.
- Processed and organized the collected data for public release.

#### MULTI-MODAL LEARNING RESEARCH

- Conducted research on multi-modal learning using texture, thermal, 3D data, text EEG data and so on.
- Developed and evaluated multi-modal learning algorithms for facial behavior analysis such as AU detection and facial expression recognition.
- Designed multi-modal fusion strategies and also mult-modal pre-training methods through self-supervised or weakly-supervised learning.

# Experience \_\_\_\_\_

JD.com, Inc.

Beijing, China

**IOS SOFTWARE ENGINEER** 

Feb. 2014 - Jul. 2017

- Responsible for the development and updating of multiple iOS applications in JD.com.
- Collaborated closely with colleagues to test and identify bugs in the applications, providing timely solutions and updates to ensure optimal user experience.

Yiwu Buy Beijing, China

**IOS SOFTWARE ENGINEER** 

Aug. 2012 - Feb. 2014

- Collaborated with product manager, UI designer, and server developer to develop an iOS application for Yiwu Buy, an online commercial company.
- Designed and implemented custom shopping features for the application to enhance the user experience on mobile devices.