# Jiaqi Tan

#### Education

#### Simon Fraser University, Canada

Sep. 2019 - Now

MASTER OF SCIENCE, COMPUTING SCIENCE (86.5/100.0)

#### **Shenzhen University, China**

Sep. 2015 - June. 2019

BACHELOR DEGREE, COMPUTER SCIENCE (85.1/100.0)

## **Publications** \_

#### Mirror3D: Depth Refinement for Mirror Surfaces

Paper | Video | Website

JIAQI TAN, WEIJIE LIN, ANGEL X. CHANG, MANOLIS SAVVA

Conference on Computer Vision and Pattern Recognition (CVPR), 2021

#### **Selecting the Effective Regions for Gait Recognition by Sparse Representation**

Paper

JIAQI TAN, JIAWEI WANG, SHIQI YU

Chinese Conference of Biometric Recognition (CCBR), 2018

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

#### **Mirror3D: Depth Refinement for Mirror Surfaces**

Simon Fraser University

Sep. 2020 - Now

MASTER STUDENT, SUPERVISOR: MANOLIS SAVVA

- Proposed and benchmarked RGB and RGBD based 3D mirror plane prediction
- Designed a simple 3D mirror prediction architecture to refine depth at mirror area
- · Generated perspective images, 3D meshes and point clouds from Structure3D synthetic panoramas

#### Gait Recognition

Shenzhen University

March. 2018 - June. 2019

Undergraduate, Supervisor: Shiqi Yu

- Used SVD to improve the gait recognition accuracy under clothing and carry-on occlusion by 20%
- Publication: Selecting the Effective Regions for Gait Recognition by Sparse Representation

#### **Human Body Detection and Emotion Recognition**

SenseTime lab

RESEARCH INTERN, SUPERVISOR: CHENHAO LIN

Feb. 2019 - June. 2019

- Pruned resnet50 to one-eighth of total model parameters to reduce with negligible drop in performance
- Added negative samples and fine-tuned NMS threshold to improve precision and recall

#### **Multi-label Classification and Object Detection**

SenseTime lab

RESEARCH INTERN, SUPERVISOR: CHENHAO LIN

Oct. 2018 - Feb. 2019

- Used loss function from Gradient Harmonized Single-stage Detector to balance hard and easy samples
- Preprocessed data to improve metrics such as mean average precision, recall and Top-5 accuracy

### **Honors & Awards**

- 2019 Recipient of excellent thesis award, Shenzhen University
- 2017-18 Recipient of Shuangchuang Scholarship, Shenzhen University
- 2017 Recipient of Star Student Scholarship, Shenzhen University
- 2017 Recipient of National Scholarship, China Scholarship Council

# **Position of Responsibility** \_

#### Shenzhen University Hip Hop Club

Shenzhen University

COORDINATOR

June. 2016 - June. 2017

- Organized renowned dance events like SZU Hip Hop Club opening event, SZU Hip Hop Club YA, etc
- Collected and managed funding from outside organization (Red Bull, Shenzhen BBR club, etc)