Tian Fengrui

SenseTime Research Intern, Postgraduate
Age: 23
Phone: (+86) 18744296191
Email: tianfr@stu.xjtu.edu.cn
GitHub: https://github.com/tianfr
English Proficiency: TOEFL 92; CET-6 546
Research Interest: Computer Vision, Self-supervised Learning

EDUCATION

B.S. in Xi'an Jiaotong University *2017.09-2021.07*
Software Engineering
GPA: 3.6 / 4.0
Supervisor: Zhiqiang Tian

(Recommended postgraduate) M.S. in Institute of Artificial Intelligence and Robotics, XJTU *2021.09-2024.07*
Pattern Recognition and Intelligent Systems
Supervisor: Shaoyi Du

RESEARCH EXPERIENCE

Fundamental Vision Department, SenseTime, Beijing
Research Intern, Supervisor: Jifeng Dai and Yueqi Duan *Start from 2022.03*

- Research on 3D new view synthesis;
- Responsible for maintaining 3D new view synthesizing codebase and evaluating the state-of-the-art methods;
- Designed the algorithm for bullet-time and generative view synthesis of videos by using monocular videos.

MEGVII Research Video Group, MEGVII, Beijing
Research Intern *2021.04-2022.02*

- Research on fine-grained video representation with self-supervised learning (SSL);
- Responsible for maintaining SSL codebase of our group and evaluating the state-of-the-art SSL methods.
- Proposed a video representation learning network based on feature differences. It directly captures motion information by frame feature difference.
- Designed a video classification method based on strong-weak augmentations of videos;
- Completed the submission of one paper and two patents;
- Won the title of August Outstanding Intern in Megvii Video Department (the only one in the group);
- **Fengrui Tian** et al. Self-supervised Video Representation Learning with Frame Difference Contrasting.

Study on Hybrid Human-computer Segmentation Method for Weakly Labelled Human Organ Images, Xi'an Jiaotong University
Participant *2019.11-Present*

- Dedicated to applying deep learning technology in medical image analysis to the real world by combining human interaction and segmentation algorithm;
- Focused on how to combine radiologists' interaction experience with deep learning methods;
- Proposed an interactive segmentation method that learns radiologist interaction experience by using residual corrections;
- **Fengrui Tian**, Zhiqiang Tian*, Zhang Chen, Dong Zhang, Shaoyi Du*. Surface-GCN: Learning Interaction Experience for Organ Segmentation in 3D Medical Images.

Mining Communities in Big-Data with Algorithms, National University of Singapore
Team Leader *2019.07*

- Organized other 3 group members to detect potential connections between movies and books with data on Douban website by data mining algorithms;
- Analyzed the relationship between 105 user groups and 8 different types of books and the relationship between 117 movies and different groups of users and then established the connection "books-users-movies" based on those 2 relationships;
- **Project in Github** **Project Home Page**

SKILLS, CERTIFICATES AND OTHERS

Outstanding undergraduate thesis in Xi'an Jiaotong University (TOP 1%) *2021.6*
The third prize scholarship in Xi'an Jiaotong University *2019.11, 2020.11*
Bronze medal in China College Computing Contest Group (CCCC) Programming Ladder Tournament *2019.4*
Outstanding Student in Xi'an Jiaotong University *2019.11, 2020.11*