

YUEDONG CHEN (DONALD)

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EDUCATION

Sun Yat-sen University, Guangzhou, China

M.E. in Software Engineering

Supervisors: Assoc. Prof. Xiaohua Xie and Prof. Wei-Shi Zheng

Sept 2016 - Jun 2018

GPA: 3.9/4.0

National Chi Nan University, Taiwan

Exchange Student (One Semester)

Sept 2014 - Jan 2015

Sun Yat-sen University, Guangzhou, China

B.E. in Software Engineering

Sept 2012 - Jun 2016

GPA: 3.7/4.0, Rank: 8/35

NATIONAL STANDARDIZED TESTS

IELTS Overall 7.0 (L: 8.0, R: 9.0, S: 5.5, W: 5.5)

GRE 317 (V: 149, Q: 168) + W: 3.0

SELECTED AWARDS

Second Class Scholarship of Sun Yat-sen University (2015, 2017)

Third Class Scholarship of Sun Yat-sen University (2014, 2016)

RESEARCH INTEREST

Computer Vision

Image enhancement & generation, Facial analysis

Machine Learning

Graph representation learning, Few-shot learning

PUBLICATIONS

Yuedong Chen, Jianfeng Wang, Shikai Chen, Zhongchao Shi, and Jianfei Cai. “Facial Motion Prior Networks for Facial Expression Recognition”. (*arXiv: 1902.08788*, 2019. Under submission to a top conference.)

Yuedong Chen, Xiaohua Xie, and Wei-Shi Zheng. “Perceptual Generative Adversarial Net for Motion Deblurring on Naturally Blurry Images”. (In peer reviewed at *IEEE Transactions on Circuits and Systems for Video Technology (TCSVT)*)

PROJECTS

Facial Motion Prior Networks for Facial Expression Recognition

Aug 2018 - Present

- Proposed a novel end-to-end deep learning framework for FER, where we introduce an additional stream to generate a mask to focus on facial muscle moving regions.
- Incorporate prior domain knowledge by using average differences between neutral faces and the corresponding expressive faces as the guidance for facial motion mask learning.
- Extensive experiments demonstrate the effectiveness of the proposed approach.

Perceptual Motion Deblurring on Real Scenes

Oct 2016 - Jul 2018

- Proposed a dual-camera and matching algorithm based method for naturally blurred image dataset construction.

- Proposed an image dataset that contains paired sharp and naturally object motion blurred images.
- Proposed an end-to-end motion deblurring model, based on GANs and perceptual loss.

Image Caption (Bachelor Final Project)

Nov 2015 - Apr 2016

- Data-driven image caption, making full use of features of both image and caption.
- Built by employing VGG net, Word2Vec and kNN algorithm, using Caffe, C++ and HTML.

TEACHING EXPERIENCE

Teaching Assistant, Software Testing (undergraduate course), Spring 2017

WORK EXPERIENCE

Institute for Media Innovation, Nanyang Technological University

Jan 2019 - Present

Research Associate. Supervisor: Prof. Jianfei Cai

Singapore

- Doing research on using Action Units to improve the quality of 3D facial reconstruction.

AI Lab, Lenovo Research

Jul 2018 - Dec 2018

Research Intern. Supervisor: Dr. Zhongchao Shi

Beijing, China

- Responsible for improving the performance of facial expression recognition through integrating prior domain knowledge as well as using label enhancement technique.
- Help to design and build up a large-scale dataset for face liveness detection.

China Mobile Communications Group Co., Ltd.

Jun 2015 - Aug 2015

Big Data Research and Development Engineer Intern

Guangzhou, China

- Cooperate with teammates to build a distributed system which can efficiently generate an easy-to-understand report by analyzing a great amount of user mobile beacons.
- Wins **the second place** out of eight intern teams.

TECHNICAL AND PERSONAL SKILLS

Programming Language

Python, CPP, C, Java, Matlab, *etc.*

Deep Learning Tools

PyTorch, Tensorflow, Caffe

Web Development

Django, HTML, CSS, JQuery, *etc.*

Language

English, Teochew (native language), Mandarin, Cantonese

HOBBIES

Coding.

Reading.

Guitar: has played for more than 4 years and is interested in *Fingerstyle*.