WANG YAODONG

+86-15626179161   ◇ CaptainDuke328@gmail.com   ◇ Captwang.info

Address: 382 Waihuandong Road, Panyu District, Guangzhou, Guangdong 510006

EDUCATION

The University of Hong Kong   **Hong Kong, CHN**

· M.S. major in Computer Science.   Sept. 2017 – Present
· Been recommended for a direct entry into postgraduate studies and scholarships without being required to take any entrance examinations.

Rutgers, The State University of New Jersey   **New Jersey, USA**

Student Summer Program in Dept. of Mechanical & Aerospace Engineering   July.– Aug. 2016

· Core courses: Introduction to 21st Century Engineering(Lecture), Introduction to Robotics(Lab).
· Final grades: All of grades were Level A.

South China University of Technology   **Guangzhou, CHN**

B.S. major in Electrical & Information Engineering.   Sept. 2013 – Jun. 2017

· Major GPA: **89.0/100 (3.78/4),** Overall GPA: **85.4/100 (3.63/4)**.
· Core courses: C++ Programming, Data Structure, Objected Oriented Programming, Digital System Designing

PUBLICATION

[1] Tangquan Qi, Yong Xu, Yuhui Quan, **Yaodong Wang**, Haibin Ling. Image-Based Action Recognition Using Hint-Enhanced Deep Neural Networks, Neurocomputing 267(2017) 475-488. (**Accept**)

[2] Patent Application: A Dlib Library Based Face Landmark Detection Technique and Its Application in Face Liveness Detection. **Yaodong Wang**, Wenhan Luo (**Submitted** in May, 2018)

[3] Patent Application: A Triangle Constrained Technique Utilized in Defensing Spoof Face. **Yaodong Wang**, Wenhan Luo. (**Submitted** in May, 2018)

EXPERIENCES

➢ **AI-Lab, Tencent**   April 2018 - Present
Internship, under Dr. Wenhan Luo.   Shenzhen

· **Engaged** in Face Liveness Detection program, driven by millions of customers' data. This program is a deep learning based Internet application, mainly focusing on face detection, recognition, spoof detection & defense.
· **Modify** the VGG-16 Net with the insight from ResNet. We reconstruct the network, adding residual network structure to it. Through visualization of the convolutional kernels from the last layer and deconvolution process, we find our model learned specific facial features of human. **Higher than 96%** accuracy achieved in the wild condition, tested by millions of data legally collected by Tencent.
· **Constructed** a liveness detection module by using dlib library and python, one light and tiny module embeded before deep learning model. Techniques inside this module make it much more robust than current tiny modules. I have submitted **two patent** applications through Tencent corporation in May, 2018.
· **Connecting** deep learning model with product testing side. I package the origin model written by Caffe into Dynamic Link Library in Linux, adjusting and encrypting it.

- **Big Data Analysis & Processing Engineering Technology Research Center of Guangdong Province**
  Sep. 2016 – Feb. 2017
  Under Prof. Yong Xu, A.Prof. Yuhui, Quan   *Guangzhou*
  - **Independently** reconstructed a soft attention based model [1] for the task of action recognition **in videos**, meanwhile I add sparse coding scheme inside the layers of Long Short-Term Memory (LSTM). I multiplied the feature maps extracted from frames by GoogLeNet with the probability matrix constrained by L2-Norm, which is learned from LSTM. Due to the modification above, the accuracy on Hmdb-51 Dataset was **increased by 8% compared with the paper.**
  - **Assisted** to design a Hint-Enhanced deep neural network to deal with an image-based action recognition problem, and implemented parts of the code of the task in Caffe and Tensorflow.
  - **A paper**, titled *Image-Based Action Recognition Using Hint-Enhanced Deep Neural Networks*, accepted by Sci. Journal Neurocomputing in June, 2017. Cite Score:3.61.

  [1] Sharma S, Kiros R, Salakhutdinov R. Action Recognition using Visual Attention[J]. Computer Science, 2015.

- **Department of Mechanical and Aerospace Engineering**   July. 2016 – Aug. 2016
  Team Leader, Under Prof. Jingjin Yu, Dr. Jeff Wang, etc.   *New Jersey, USA*
  - **Built** a mobile robot and implemented sensing & control algorithms for autonomous navigation, through execution of the sensing-computation-actuation loop.
  - **Programming** in C++ and python, using Raspberry Pi and studying the circuits of the robotic vehicle.
  - **Responsible** team construction, framework construction and final representation.

- **British Council**   Mar. 2017 – Mar. 2018
  Test Day Personnel for CFA and ACCA exams   *Guangzhou*
  - **Responsible** for monitoring process of the exam, document filing and conditional report.
  - **Completed** training with BC Education Consulting(Beijing) Company Limited Guangzhou Branch
  - **Getting** working experience in the UK's international organization for cultural relations and educational opportunities

HORNORS，AWARDS & SCHOLARSHIPS

Academic Competition
- Global Kaggle competition, 165th in MINIST dataset classification.   Nov.2016
- Asia and Pacific Mathematical Contest in Modeling **(APMCM)**,3rd Prize   Sep.2015

Scholarship & Research fund
- Entrance Scholarship for Excellent Freshman Graduate Student of SCUT   Sep. 2017
- Scholarship for Academic Excellent Student of SCUT for three consecutive years (Top 20%)   2014 – 2017

LEADERSHIP & VOLUNTEER

E-light Youth volunteer service team, *Volunteer*   Sep. 2013 – Jun. 2015
- Volunteered at Guangdong Volunteer Association for over 30 hours.

Student Union of college in SCUT, *Minster of Organization Department*   Oct. 2014 – Sep. 2015
- Organized the Welcome Party for the Fresh, Annual General Conference and etc.
- Responsible for planning scheme, event execution, and production of videos and PPT.

SKILLS & PERSONALS

Programming Language
- Skilled with Python, C++ and Java; Average in MATLAB and Django.
- Proficient in Tensorflow and other conventional machine learning algorithms.