YANG FEI

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EDUCATION

Undergraduate – Electrical Engineering   **GPA:76%**

Xi'an Jiaotong Liverpool University, Suzhou, China   Feb. 2012 – Jun. 2014

University of Liverpool, United Kingdom   Sep. 2014 – Jun. 2016

Master – Information Technology   **GPA:78%**

University of Melbourne, Australia   Jan. 2017 – Jul. 2018

Exchange – Computer Science   **GPA:3.85/4**

University of Maryland, College park, United States   Aug. 2018 – Jan. 2019

Research Engineer – Computer Vision

Huawei 2012 Lab Video Engineering Dept, Hangzhou, China   Apr.2019 – Present

SKILLS: MATLAB, SQL, C, C++, Python, Java, Haskell, Pytorch, TensorFlow

LANGUAGES: Mandarin (Native), English (Fluent).

PROJECT

Video Understanding– Research Engineer   Mar.2020 – Present

To investigate SOTA method used in the field of video understanding, especially AVA dataset and try to improve based on current method (e,g. three branch network).

Face Feature Verification – Research Engineer   Dec. 2019 – Mar.2020

A model was built for comparing whether two features are from same person. This model successfully increase recall by 3% at 1e-10 false positive rate

Face Restoration – Research Engineer   Jun. 2019 – Dec.2019

Try to restore frontal face pictures from features extracted from surveillance pictures by face recognition model. Intention of this project is to visualize the feature and see how model makes prediction. A patent was filed based on this research.

Cross Model Face Recognition – Research Engineer   Apr. 2019 – Jun.2019

Features of same picture extracted by different models are arranged in separate embedding space and thus cannot be used to compare similarity. Intention of this Project is to translate features from one embedding space to another in order to achieve cross model face recognition.

ExtractGAN – System Developer   Nov. 2018 – Dec. 2018

Self-Proposed network inspired by CycleGAN in order to achieve generalization in style extraction and then apply them to any other pictures (and now it looks like MUNIT fully achieved this goal).

Quiz bowl – System Developer   Nov. 2018 – Dec. 2018

A system based on BERT and TF-IDF model in order to win a jeopardy-like game. The model named "FYY" achieved 1st in Qanta. (for those who were interested, see https://www.youtube.com/watch?v=970Eu_oETDI)

Flower Classification – System Developer   Sep. 2018 – Oct. 2018

Classify specific set of flower dataset by using VGG16 and data augmentation tricks in Pytorch, which end up with accuracy 83%

Question-Answering System – System Developer   Mar. 2018 – Apr. 2018

Recurrent neural network and DAN was used for training in order to get the correct answer. In addition, a rule-based QA system were also designed in order to compare the performance.

Pac-man Path Finding and Competition – Planning Designer   Oct. 2017 – Nov. 2017

Help Pacman to get the food with shortest path by various searching algorithms, such as Breadth first search (BFS), Depth first search (DFS), A*, greedy search. Reinforcement learning is used in this project implemented by python.

Multiple User Canvas System – System Developer   Oct. 2017 – Nov. 2017

A canvas which allows multiple user to draw simultaneously on one single canvas through remote procedure call by java. Drawing part was achieved by JavaFx and every action that users did would be send to server through binding method. Server is responsible for handling connection among all clients and sending action messages to all clients in json format.

RESPONSIBILITIES

Student Representative, Electrical and Electronic Engineering Department   Sep. 2013 – Jun. 2014

Chosen as the student representative for the department, whose committee responsibilities included transmitting student advice to the department. Also responsible for communicating with guests and introducing them to students in the department.

SCHOLARSHIPS

University of Liverpool Excellent Performance Scholarship

The scholarship which equals 15% of tuition fees of University of Liverpool owing to excellent performance in Xi'an Jiao-tong Liverpool University.

University of Melbourne Study Aboard Scholarship

Scholarship offered by university of Melbourne to support students who study aboard.