

Qingyang Tan

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EDUCATION

University of Chinese Academy of Sciences (UCAS) Sept 2014 - Present

Bachelor of Engineering (Expected 2018)

Overall GPA: 3.89/4

Subject GPA: 3.90/4

Class ranking: 1/68

Massachusetts Institute of Technology (MIT)

Feb 2017 - May 2017

EECS Special Student

GPA: 5.0/5.0

RESEARCH AND PROJECT

Classification and Recognition of Isolated and Continuous Sign Language

Sept 2017 - Present

Institution: Institute of Computing Technology (ICT), Chinese Academy of Sciences (CAS)

Director: Prof. Xilin Chen, Prof. Xiujuan Chai

- Developed end-to-end and multi-task framework to classify sign language video
- Applied spatial and temporal aggregated feature to sign language video

Neural Network for 3D Mesh Data

May 2016 – Sept 2017

Institution: Institute of Computing Technology (ICT), Chinese Academy of Sciences (CAS)

Director: Prof. Shihong Xia, Dr. Yu-Kun Lai, Prof. Lin Gao

- Combined neural network and intrinsic mesh feature to analysis and generate 3D data
- Defined new tunable parameters for network to capture most important deformations in certain dimensions
- Applied graph-based Convolutional Neural Networks (CNN) on irregular 3D mesh surface
- Added distance-based sparsity constraint to autoencoder framework
- One paper accepted by *AAAI-18*
- One paper currently submitted to *CVPR 2018*

Machine Learning Application in Startup Success

Feb 2017 - May 2017

Institution: Massachusetts Institute of Technology

Director: Prof. Christian Catalini

- Developed code and tools to predict startup growth
- Processed large-scale dataset of startup funding and growth events
- Acquired and cleaned raw public data from website including LinkedIn and Github

Control System Implementation for Testing Biomedical Material

Feb 2017 - May 2017

Institution: Massachusetts Institute of Technology

Director: Prof. Elazer Edelman

- Constructed system to test bioresorbable vascular scaffold material
- Programmed control software for the testing system

Ultra-sensitive Controllable Antibiotics Scavenger

Apr 2016 - Oct 2016

Institution: Institute of Biophysics (IBP), Chinese Academy of Sciences (CAS)

Director: Prof. Jiangyun Wang

- Investigated antibiotic pollution situation in China
- Designed and built bio-system for degradation of antibiotics
- Built wiki website for the project via HTML
- Silver Medal for International Genetically Engineered Machine (iGEM) Competition

PUBLICATIONS

Qingyang Tan, Lin Gao, Yu-Kun Lai, and Shihong Xia. "Variational Autoencoders for Deforming 3D Mesh Models". In: *arXiv preprint arXiv: 1709.04307*. 2017. **Submitted to CVPR 2018**

Qingyang Tan, Lin Gao, Yu-Kun Lai, Jie Yang, and Shihong Xia. "Mesh-based Autoencoders for Localized Deformation Component Analysis". In: *arXiv preprint arXiv: 1709.04304*. 2017. **Accepted by AAAI-18 (Spotlight)**

HONORS AND AWARDS

UCAS First-Class Academy Fellowship

Oct 2015 / Oct 2016 / Oct 2017

Given by University of Chinese Academy of Sciences to top 5% students in each department.

UCAS Best Undergraduate Research-Intern Report

Nov 2015 / Apr 2016

EXTRACURRICULAR ACTIVITIES

Asian International Model United Nations, Peking University, Beijing

Apr 2016

Editor for UCAS Undergraduate Social Platform, UCAS, Beijing

Sept 2015 - June 2016

Volunteer Science Teacher, Hua-Ao School, Beijing

Oct 2014 - Jan 2015

SKILLS

- Hands on experience of Machine Learning and Neural Network libraries like TensorFlow, scikit-learn, Theano, Torch, Caffe
- Fluent in C, Matlab, Python
- Knowledge of SQL, Verilog, HTML

STANDARDIZED TEST SCORES

TOEFL iBT: 101 (R 29, L 25, S 22, W 25)

TEST DATE: July 15, 2017

GRE: 323 + 3.5 (V 154-65%, Q 169-96%, AW 3.5-42%)

TEST DATE: Oct 22, 2017

REFEREES

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|-----------------------------------|---------------------------------|------------------------------------|
| 1. Name: Prof. Xilin Chen | Affiliation: ICT, CAS | Email address: xlchen@ict.ac.cn |
| 2. Name: Prof. Shihong Xia | Affiliation: ICT, CAS | Email address: xsh@ict.ac.cn |
| 3. Name: Dr. Yu-Kun Lai | Affiliation: Cardiff University | Email address: LaiY4@cardiff.ac.uk |
| 4. Name: Prof. Christian Catalini | Affiliation: MIT | Email address: catalini@mit.edu |
| 5. Name: Prof. Shimin Chen | Affiliation: ICT, CAS | Email address: chensm@ict.ac.cn |
| 6. Name: Prof. Yungang Bao | Affiliation: ICT, CAS | Email address: baoyg@ict.ac.cn |