

Jiang Zihang(蒋子航)

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EDUCATION

University of Science and Technology (USTC), Hefei, China

- University of Science and Technology (USTC), Hefei, China
- 2015.9-2019-6: Hua Loo-keng Talent Program in Mathematics
- Orientation: Computational Mathematics
- Main relevant courses:
Computer Graphics (4.3/4.3), Introduction to Data Science (4.3/4.3), Differential Geometry (H), Mathematical Modeling, Introduction to Algorithm, Algebra I, II (H) (4.0/4.3), III (Graduate course) (4.0/4.3), Numerical Algebra (4.0/4.3), Real (4.3/4.3)/Complex analysis, Topology (H) (4.3/4.3)

RESEARCH EXPERIENCE

- | Project name USTC Researcher | time |
|---|------|
| ➤ Handwriting Province Recognition based on Deep Learning Framework Keras (2016 spring Mathematical Modeling)
Simple classification of handwriting Chinese (of Province name) based on convolutional neural network (CNN) | |
| ➤ Reconstruction of CT image and parameters calibration (2017 fall Mathematical Modeling Competition)
Reconstruction of CT image based on Radon transform.
Wining the first price in the competition | |
| ➤ Car Logo Recognition based on Synthetic data (2017 fall http://www.datafountain.cn/#/competitions/278/ranking/a/2/2 No.38)
Detect the location of car logo(small object) and classification based on Faster-RCNN (and RetinaNet).
And using GAN to generate car logo to improve performance. | |
| ➤ Object removal (2018 spring Mentor: Juyong Zhang Group: face recognition based on deep learning)
Inspired by Partial convolution and Progressive GAN, we want to remove a chosen object in the picture and fix the hole with the background message. | |
| ➤ Iron Man (2018 spring Teacher: Ligang Liu: Computer Graphics)
Main work is to develop a hardware with camera and cloud table (which can be applied on UAV) can automatically find people, distinguish the bad gay and good gay based on the face image given. The platform using is basically Arduino and we utilize multiprocessing to control the step of locating people. | |
| ➤ Community detection (2018 Summer Mentor: Leong Hon Wai)
Apply VAE and CNN to analysis the data of fashion clothes every year in London Fashion Week (LFW), and apply Markov Clustering and Girvan Newman Algorithm to analysis the community detected. | |

LEADERSHIP & EXTRACURRICULAR ACTIVITIES

- Vice Minister of the editorial department

SKILLS AND OTHERS

GOOD AT PYTHON(C++) AND TENSORFLOW (DEEP LEARNING FRAMEWORK), FOND OF MACHINE LEARNING ALGORITHM ,
ARCHITECTURE OF NEURAL NETWORK AND INTERPRETABILITY STUDY , COMPUTER VISION, COMMUNITY DETECTION.
HAVING PRETTY GOOD MATHEMATICAL FOUNDATION (ESPECIALLY IN ALGEBRA AND MATRIX ANALYSIS) AND CODING
SKILL TO REALIZE IDEAS. ALSO BE CURIOUS ABOUT HARDWARE AND OPTIMIZATION OF COMPUTING (LIKE MULTIPROCESSING)