Yanshu Zhang

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Education

University of Science and Technology of China(USTC)

09/2017-Present

School of Computer Science and Technology, GPA: 3.64/4.3 (86.86/100)

09/2018-Present

School of Life Science, GPA: 3.2/4.3(82.03/100)

09/2017-09/2019

Major courses (score/100): Computer Networks(95), Stochastic Processes(96), Introduction to Algorithms(89), Algebraic Structure(88), Operation System(90), Computer Organization(88), Probability and Statistics(96), Mathematical Logic(88), Program Design(90), Introduction to Data Science(95)

Research Experience

One-stage Instance Segmentation | Team Member

10/2019-Present

Advisor: Prof. Chen En Hong, Dept. of Computer Science, USTC. Xu Tong, Associate Researcher, USTC.

- Found out some deficiencies in current methods such as inappropriate IoU loss
- Proposed some improvement ideas for existing methods like adaptive modeling
- Learned to read the source code and how to train and test the model on the server
- Learned basic machine learning methods and read related papers about object detection

Prediction of Quality Consistency of Typical Workpieces | Team Leader

09/2019-12/2019

Advisor: Prof. Liu Qi, Dept. of Computer Science, USTC.

- Invented a two-stage classification method, which regress to predict attributes first
- Used various methods for data preprocessing, such as PCA and feature construction
- Applied multiple boosting models for regression and classification, and model stacking for ensemble learning
- Implemented all the above ideas and the whole pipeline in Python

Mining Communities in Movie Posters | Team Member

07/2019-08/2019

Advisor: Leong Hon Wai, Associate Professor, Dept. of Computer Science, NUS.

- Proposed the research direction, digging relationships between similar posters, of the group of four
- Responsible for half of the technical work e.g. Collect and preprocess data set
- Calculate dissimilarity matrix of posters using pre-trained ResNet50, Build graph and detect communities
- Evaluate performance of different clustering algorithms such as Girvan-Newman and k-clique algorithm

Leadership & Activities

Student Union of School of Life Science | Minister of Secretary Department

09/2017-06/2019

- Participated in the affairs of Secretary Department
- Hosted a series of student activities e.g. Dubbing Contest, Welcome Party
- Well performance under pressure, good communication and logical skills, good sense of teamwork

Awards

Silver Award for Outstanding Students of USTC (top 20%)
Bronze Award for Outstanding Students of USTC (top 40%)
09/2018

Skills and Certificates

- Engineering Skill: Familiar with PyTorch, experienced in TensorFlow, familiar with command processor
- Computer Skill: Solid expertise in C, Python, experienced in C++, MATLAB, Mathematica, HTML, CSS
- Language ability: English (fluent), Chinese (native), TOFEL: 92(R:24,L:24,S:23,W:21)