Jingtun Zhang
https://github.com/OrdinaryCrazy/
Email : zhangjingtun@gmail.com
Mobile : (+86) 17718153259

Education

- **University of Science and Technology of China (USTC)** Hefei, Anhui, China
  Undergraduate in Computer Science *School of Computer Science and Technology* *Sept. 2016 – Present*
  - **Major**: Member of Hua Xia Talent Program in Computer Science and Technology
  - **Overall GPA**: 3.66/4.30
  - **Major GPA**: 3.82/4.30
  - **Weighted Average**: 87.35/100
- **Shanghai Jiao Tong University (SJTU)** Shanghai, China
  Exchange student in Computer Science *Feb. 2018 - Jun. 2018*
- **2018 AEARU Summer Campus in Peking University (PKU)** Beijing, China
  Exchange student in Computer Science *July 2018*

Research

- **Research on Small Scale Object Recognition Based on Deep Neural Network**
  Advisor: Prof. Naijie Gu *Dec. 2018 – Present*
  - **Background**: Object detection analyzes the category of objects and uses the bounding box to circle the specific position of the object in the image.
  - **Problem**: In the actual object occlusion and small object size problems, most models are weak.
  - **Main research contents**:
    - Positioning small-scale targets in images based on Faster RCNN
      - Quantifying the Anchor Scale in Faster RCNN
      - Biased fine-tuning training
      - Optimizing model performance with various training parameters and strategy choices
    - Finding small area candidate area proposal based on picture color features
      - Area similarity calculation based on color features
      - Small target candidate area generation
    - Computing multi-scale feature fusion and context information fusion based on convolutional neural networks
- **High quality dataset generation based on dataset quality assessment algorithm**
  Advisor: Prof. Lan Zhang *Dec. 2018 – Present*

  Generating high-quality data sets based on existing data quality assessment algorithms, including:
  - Generating a data set that combines consistency and diversity and can be used to train the model.
  - Adding and deleting operations for a given data set at a lower cost to improve the quality of the set.
  - Sampling a high quality data set from multiple data sets as needed.
  - Generating data set can be used to train the model by GAN.

Course Projects

- **SDN simluated network based on mininet (Supervisor: Prof. Yanmin Zhu)**:
  Built a virtual SDN network based on mininet virtual machine and test execution of several Internet protocols.
- **Kaggle Competition Of Text Classification (Supervisor: Prof. Weinan ZHANG)**:
  Used machine learning algorithm to classify articles for a journal.
- **Kaggle Competition Of Link Prediction (Supervisor: Prof. Weinan ZHANG)**:
  Used Graph Embedding Algorithms to predict potential links in an academic network.
  - Used huristic algorithms such as TransE.
  - Used Collaborative filtering to choose potential links.

- **Model of Graph Multi-task Learning (Supervisor: Prof. Jian Tang)**:
  Built a multi-task learning model based on graph data.
- **Basic Graph Database (Supervisor: Prof. Leonid Libkin)**:
  Basic building and usage graph databse such as Neo4j.
- **User Portrait Analysis System Based on Sougou Search Engine History (Supervisor: Prof. Qi Liu)**:
  Analysed users' attributes like age, sex, education and etc according to users' search history on Sougou Search Engine.
- **C1 Language Compiler (Supervisor: Prof. Yu Zhang)**:
  Built compiler system for C-like language – C1 language using LLVM & Antlr4.
- **2018 CCF Big Data&Computational Intelligence Contest (BDCI) Competition (Supervisor: Prof. Qi Liu)**:
  Analyzed the user's preferences for the topic by mining topic and emotional information from the text content .
- **DBWorld Search Engine (Supervisor: Prof. Peiquan Jin)**:
  Built a Search Engine for DBWorld website.
  - Built Tomcat server in respond to JSP query.
  - Used entity recognition algorithm to support retrieval.
- **Erdös co-author network mining (Supervisor: Prof. Linli Xu)**:
  Used graph mining algorithm and community finding algorithm to find influncial nodes and analyse community architecture in Erdös co-author network.
  - Influncial analysis to find important authors.
  - Spectral clustering to analyse community structure in the network.

Selected Awards

- **National Scholarship** Oct. 2018
  The scholarship for top students
- **Scholarship in The Talent Program in Computer & Information Science** 2016, 2018
  For outstanding students selected to the talent program of computer science
- **USTC's 60th Anniversary Celebration Activity Collection Contest Winner** Jan. 2018
  For Contributing students in anniversary celebration activity.
- **Excellent Social Investigator** Jan. 2018
  For Contributing students in National Social Science Fund Project Research.
- **Outstanding Student Scholarship (Silver)** Dec. 2017
  For top students in USTC
- **Excellent Youth Communist** May 2017
  For Contributing students in voluntary work and class activity.
- **Outstanding Student Scholarship (Bronze)** Dec. 2016
  For top students in USTC

Selected Extra-Curricular Activities

- **College Student Union Member & Leader** Oct. 2016 – May. 2018
  Organized activities and in charge of outreach and equity work.
- **Class Psychology Committee** Sept. 2016 – Dec. 2018
  Organized class activities and in charge of student psychology health care.

Skills

- **Programming Languages**: C/C++, Python, Java, Matlab, Verilog, HTML, JSP
- **Technologies** : LaTeX, Qt5 & Qt Creator4.8 , Tomcat, Git, OOP
- **Machine Learning Tools & Deep Learning Platforms**: scikit-learn, TensorFlow, Keras, Pytorch, Numpy & Pandas & Scipy & Matplotlib
- **English**: TOEFL IBT: 93 (R:27 L:25 W:21 S:20)