

EDUCATION

- **University of Science and Technology of China(USTC)** Hefei, China
B.S Department of Automation(expected in Jul 2021) *Sep. 2017 – Present*
 - **GPA:** 3.86 / 4.0 in WES standard, rank 7/100
 - **Selected Courses:** Pattern Recognition(97/100), Electromagnetism A(95/100)
Complex function(95/100), Probability and Statistics(95/100), Signal and System(95/100)
Machine Learning(95/100).

SELECTED RESEARCH EXPERIENCES

- **EdgeGCN: Not Every Edge is Trustworthy** UIUC
Advisor: Prof.Kevin CC. Chang, forward data lab *Jun 2020- Jan 2021*
 - Rethinking the Graph Neural Networks from the aspect of semi-supervised learning(SSL) methods
 - Developed code based on PyTorch¹
- **KD for Rec: Knowledge Distillation for Recommendation** USTC
Advisor: Prof.Xiangnan He, Lab for Data Science *Jul 2020-Jan 2021*
 - Make big embedding models for recommendation system become small and good enough.
 - Developed codebase for multi baselines,based on PyTorch².
- **Simplifying and Powering Graph Convolution Network for Recommendation** USTC
Research Assistant, Advisor: Prof.Xiangnan He, Lab for Data Science *Jun 2019-Oct 2019*
 - Aim to simplify the design of GCN to make it more concise and appropriate for recommendation.
 - Developing PyTorch version of the model³
 - The paper is being accepted by *SIGIR2020*⁴.

SELECTED PROJECTS

- **TorchTrace** *Github repo*
Autograd library
 - Implemented most of the operations we need to build a neural network, with autograd supported
 - The PyTorch-like API's fashion, we can easily migrate a PyTorch code into a torchtrace code
 - Implemented a reinforcement learning algorithm DQN⁵ in TorchTrace
- **PRank** *Github repo*
Binary Relationship extractor for text mining
 - A library for text mining, especially designed for binary relationship.
 - Strong scalability, Pure Python

¹<https://github.com/gusye1234/EdgeNN>

²https://github.com/gusye1234/KD_on_Ranking

³<https://github.com/gusye1234/pytorch-light-gcn>

⁴<http://staff.ustc.edu.cn/~hexn/papers/sigir20-LightGCN.pdf>

⁵<https://github.com/gusye1234/2020-ML-project>

WORK EXPERIENCE

- **MengXi Investment Company** Shanghai, China
Online Intern *Jun 2018-Sep 2018*
 - Developed grammar analysis engine of the system in python alone to let users can use a simpler grammar to build their own quantitative standards to pick a stock.
 - Got the chance to have full internship of the company in ShangHai(9 in 150).
- **Muti-agent system Lab USTC** Hefei, China
Research Assistant *Aug 2018-Dec 2019*
 - Main developer of the automated system for packing box in delivery industry, consisted of online packing algorithms, multi-joints arms planning, 6D pose and scale estimation, image processing.
 - Integrated machine learning algorithms into packing system to estimate boxes' 6D pose and scale estimation for grasping.

LEADERSHIP AND AWARDS

- **Mathematical Contest In Modeling** USA
Meritorious Winner *Mar. 2020*
 - Play the role of coding and mathematical modeling
- **Robotics and AI Summer School of Imperial College London** London, US
Group Leader *Jul 2019-Aug 2019*
 - Coordinated with group members from different cultures to complete a demo⁶ in 3 weeks.

SKILLS

- **Languages:** Mandarine(Native), English(Toefl 103, GRE 328+3.5)
- **Programming Languages:** Python, Java, go, Julia, C/C++, MATLAB, L^AT_EX
- **Library:** Pytorch, Tensorflow, OpenCV, Bullet, Sklearn, Numpy ...
- **Platform:** ROS, Arduino

LINK

- **Github**
- **Personal Website**

⁶<https://github.com/gusye1234/LachFore>