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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, Top 5% in 330+
  - **Selected Courses**: Linear Algebra(92/100), Pattern Recognition(97/100), Electromagnetism A(95/100) Calculus for Function of a Single Variable/Several Variables (92/100, 88/100), Data structure(90/100) Complex function(95/100),Probability and Statistics(95/100) Linear circuit(93/100), Signal and System(95/100), Principle of Automatic Control(88/100).

Research Experiences

- **Graph Neural Network for Recommendation System** USTC
  Research Assistant, Advisor: Prof.Xiangnan He, Lab for Data Science *Jun 2019-Oct 2019*
  - Designed a new machine learning method for graph embedding. Methods achieved promising results while requiring fewer parameters.
  - Used Tensorflow Library to build our models for fully experimenting our methods
  - Developing Pytorch version of the **model** and accelerate sampling procedure
  - The paper is being accepted by *SIGIR2020*.

- **Explainable machine learning for Eyes-Tracking model** USTC
  Research Assistant, Advisor: Prof.Bin Li, Intelligent Information Processing Laboratory *Jun 2019-Present*
  - Aim to interpret Neural Network and use that information to distill the origin model to a smaller but closely the same accurate "student" model.
  - Main developer and group leader, developing the whole project pipeline by myself.
  - **Project details**

- **Using simulated images for real-world structural information learning** USTC
  Research Assistant, Advisor: Prof.Xiaoping Chen, Multi-agent system Lab *Mar 2019-May 2019*
  - Aim to bridging the reality gap without performing system identification and using quality rendering.
  - Explored various deep learning model (GAN, Mask RCNN, *etc*).
  - Implemented the whole pipeline of model training, validating and testing.
  - Used Bullet Physics SDK to generate simulated geometric objects with random textures and background.

Work Experience

- **MengXi Investment Company** Shanghai, China
  online Intern *Jun 2018-Sep 2018*
  - Studied about the effective factors in quantitative trading and evaluated quantitative alpha factors from "alpha 101" set on the past 10 years China stock market.
  - 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.
  - Used a 6-DoF robotic arm. For grasping the box from the conveyor belt. Instead of expensive 3D laser visual sensors, cheaper depth cameras are used and used denoising algorithms for image processing and Kalman filter algorithms for stable predictions.
  - Integrated machine learning algorithms into packing system to estimate boxes' 6D pose and scale estimation for grasping.

Leadership and Activities

- **Robotics and AI Summer School of Imperial College London** London, US
  Group Leader *Jul 2019-Aug 2019*
  - Guided group members to study knowledge related to image processing and search algorithms.
  - Coordinated with group members from different cultures to complete a **demo** in 3 weeks. Helped group members to plan which part of the project they could be responsible for.
- **USTC** Hefei, China
  Class Monitor *Sep 2017-Aug 2018*
  - Organized many group activities
  - Class is rated as excellent class group of 2017

Skills

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

Link

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