Ruiqi Li

School of Electronic Information and Communication Huazhong University of Science and Technology

Email: rlee@hust.edu.cn, Personal Website: rlee.netlify.com, Github: github.com/rlee719

EDUCATION

BEng. in Electronics and Information Engineering (Undergraduate Program for Advanced Project-based Information Science Education)

Huazhong University of Science and Technology

Sept. 2017 – Sept. 2021

TOTAL GPA: 3.54 TOFEL iBT: 96

Selected Courses (Score/100):

- Linear Algebra (99), Digital Image Process (in progress), Computer Vision (in progress)
- Probability Theory and Mathematical Statistics (88), Stochastic Processes (86)
- Electromagnetic Field and Microwave Technology (90), Physics I (92)

PUBLICATION

Z. Zhou^{1st}, **R. Li^{1st}**, Y. Gao, C. Zhang and X. Hei, "SLDNet: A Branched, Spatio-Temporal Convolution Neural Network for Detecting Solid Line Driving Violation in Intelligent Transportation Systems", *Information Communication Technologies Conference*, Mar. 2020. Under review and have passed preliminary review. Available in rlee.netlify.com/files/SLD_paper.pdf.

J. Li, **R. Li**, Y. Zhou, J. Xian, X. Zhang and X. Hei, "Inferring Student's Attention in a Machine Learning Approach: A Feasibility Study," *IEEE International Conference on Consumer Electronics - Taiwan*, May 2019.

Available in ieee.org/document/8991763.

RESEARCH INTERESTS

Computer Vision (Detection, **Segmentation** and **Attention Mechanism**) Representation Learning, Deep Learning

PROJECT EXPERIENCE

Check more details in Personal Website

Transportation Project

Feb. 2019 - Present

- One of three leaders among a group of 12 students. Contract Value: 74.2K USD
- Lead development and deployment of 3 deep learning algorithms for the public transportation system of Pingxiang city.
- Research and develop algorithms in object detection, instance segmentation and image classification (eg. CBAM, MS-RCNN); write the SLDNet paper.

Embedded Systems Course Project

Oct. 2019 - Present

- Group leader, design and implement an automatic classification trashbin.
- Train and deploy LeNet-5 in Microchip MCU(Micro Control Units) using C language.

IET Program

Apr. 2018 – Sept. 2019

- Sponsored by **National Level** Innovation and Entrepreneurship Training Program for College Students, Ministry of Education.
- Technical Leader, conduct experiments and write the ICCE-TW conference paper.

Face Landmark Project

Sept. 2018 - Jun. 2019

- Group member, participate in development of a 108 points light-weight face landmark detection algorithm for Little Lights Inc.
- Contribution: Implement program based on the code of SSD and CenterNet.

HONOR & AWARDS Selected into Undergraduate Program for Advanced Project-based

Information Science Education (Seed Class)

Jun. 2019

HUST Scholarship in Science and Innovation Sep. 2018

Dec. 2017

1st Prize in HUST Mathematic Modeling Contest

SKILLS

Find, read and understand cutting-edge academic literature in Computer Vision/Deep Learning

Academic writing in English

Programming:

- Proficient skills in Python (Tensorflow/Pytorch/Sklearn), C and Latex
- Rich experience in development on Linux system
- Some experience in web development, C++ and Matlab

ADVISOR

Yayu Gao, Associate Professor

School of Electronic Information and Communication Huazhong University of Science and Technology yayugao@hust.edu.cn, cloud.eic.hust.edu.cn:8084/~yayugao/

Xiaojun Hei, Associate Professor

Deputy Head of Communication Engineering Department

School of Electronic Information and Communication Huazhong University of Science and Technology heixj@hust.edu.cn, 122.205.5.5:8084/~heixj/index_en.htm

Xinggang Wang, Associate Professor

School of Electronic Information and Communication Huazhong University of Science and Technology xgwang@hust.edu.cn, xinggangw.info/

Xinge You, Professor

Head of National Anti-counterfeit Engineering Research Center

School of Electronic Information and Communication Huazhong University of Science and Technology youxg@hust.edu.cn, eic.hust.edu.cn/professor/youxinge/