Suxin Lin

University of Electronic Science and Technology of China (UESTC), Chengdu 611731, China
Email: linsuxin28@gmail.com | Tel:(+86)1808-380-3540

EDUCATION

University of Electronic Science and Technology of China Aug 2016 - Expected Jul 2020

School of Computer Science and Engineering | *Bachelor of Computer Science*

Junior year GPA 3.98/4

Main courses:

Probability theory and mathematical statistics (4.0/ 4.0), Discrete Mathematics (4.0/4.0)

Database theory and application (4.0/4.0), Principle of Computer Organization (4.0/4.0)

RESEARCH EXPERIENCE

Neural network attack and defense |Remote Research Assistant September 2018 - February

Harvard University

- Discovered that the adversarial examples generated by a network(Resnet) performed worse on a different network(VGG)
- Ensembled neural networks with high architecture diversity to improve model robustness against adversarial examples
- Employed quantization to greatly reduce the computation and memory cost due to ensemble
- Deployed with other defense methods and improve the overall robustness
- Led to a faster, more robust and compact model than full-precise model

Neural network compression and acceleration |Remote Research Assistant September 2018 -February

Harvard University

- Implemented quantization experiment on VGG, Alexnet,etc and compared the classification performance
- Used Optimal control and BinaryRelax methods at gradient mismatch problems when we optimized binary neural network
- Avoided gradient mismatch problem and converged faster

3d shape retrieval and classification based on deep learning | Research Assistant August 2018 - October

Peking University

- Programmed to render 3D models and transformed each 3D model into 12 screenshots by Shape viewer.
- Observed overfitting phenomenon on Modelnet40
- Applied cluster strategy to exploit the reliability of screenshots instead of treating each screenshot equally in state-of-art work to improve accuracy

AWARDS

- National Excellent student reward (2018 junior year) 10/200
- Excellent international ambassador 1/200

SKILLS

- **Coding Skills:** Extensive programming on C++, Python, C, SQL and Latex.
- **TOFEL iBT: Total 101** (Reading 28, Listening 29, Speaking 22, Writing 22)
- Extensive programming on popular machine learning framework: Pytorch, Tensorflow, caffe