Mo, Jianqiao

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EDUCATION

Tandon School of Engineering, New York University

Sep 2020-Present

- ➤ PhD in Electrical and Computer Engineering (ECE)
- Advised by Prof. Brandon Reagen

School of Electronic Science and Engineering (ESE), Nanjing University

Sep 2016-Jul 2020

- Bachelor in Electronic Information Science and Technology
- > GPA: 4.57/5.0 (91.4/100); Ranking: 3rd / 71

PUBLICATIONS

- Meiqi Wang, **Jianqiao Mo**, Jun Lin, Zhongfeng Wang, and Li Du, "DynExit: Dynamic Early-Exit Strategy for Deep Residual Networks", 2019 IEEE Workshop on Signal Processing Systems (SiPS), Oct 2019
 - Received Best Paper Award (the first prize)

RESEARCH EXPERIENCES

ICAIS Lab | Nanjing University | Research Assistant

Advisors: Professor Zhongfeng Wang, Associate Professor Jun Lin, ESE of NJU

Research on Early Exit Mechanism of deep network:

Mar 2019-Mar 2020

- Early-Exit mechanism (BranchyNet): accelerate inference, reduce latency and cut down energy cost
- > DynExit: Applied a dynamic loss-weight modification strategy for BranchyNet to adaptively modify the ratios of different exit branches and find a trade-off between accuracy and cost
- Achieved remarkable performance on CIFAR-100/ImageNet dataset: we achieved standard or better performance compared to the state-of-the-art approaches at 43.6% FLOPs reduction
- ➤ Developed an architecture to speed up the dynamic Early-Exit Strategy, which was evaluated on Xilinx Zynq-7000 ZC706 development board
- ➤ Paper accepted by 2019 IEEE SiPS (Best Paper Award, the first prize)

Electronic Design Competition of China | Electrotechnics Center, NJU | Captain

Aug 2017

Advisors: Associate Prof. Jianjun Zhuang, Associate Prof. Jian Gao, ESE of NJU

- Designing a Ball & Plate Apparatus based on PID fuzzy control system; apparatus lead the ball to some specific positions by adjusting the slope of the plate according to the coordinate of the ball captured by a camera
- ➤ Designed the signal processor and PID control system on STM32-F107 microcomputer
- Processed the image signal on Raspberry-Pi with Python
- Completed the 4-days competition and received 2nd prize in Jiangsu Province, China

AWARDS & HONORS

The Samsung Scholarship (given to 18 students out of the whole university)	Dec 2018
The People's Scholarship (by Nanjing University)	Nov 2017
National Electronic Design Competition, the Second Prize (Jiangsu Province)	Sep 2017
Outstanding Student of Nanjing University (given to 8 students in ESE)	Jan 2018
The Student Fund Promoting Ambassador of Nanjing University	Jan 2018-Jun 2018
The China Merchants Bank Scholarship	Oct 2019

WORKING EXPERIENCE & EXPERIMENT PROJECTS

Jiangsu Changjiang Electronics Technology Co., Ltd | Wuxi, Jiangsu Province | Trainee Jul 2018-Aug 2018 Advisors: Prof. Yugang Zhou, ESE of NJU

- Visited the JCET as a member of The Electronic Engineering Elite Program, Nanjing University
- Went through the whole assembly line in the chip packaging and testing workshop

Experiments of AM Circuits

Dec 2018

> Implement an Amplitude Modulation (AM) transmitter and receiver system on circuit board

Fundamentals of Hardware Design (Experiment)

Jun 2019

> Coded with Verilog HDL, designed an 8-bit RISC CPU and accomplished the task of verification

ACTIVITIES

The Student Fund Promoting Ambassador | Nanjing University

Jan 2018-Jun 2018

- Responsible for publicizing the funding policy of university
- > Publicized the funding policy in high school

Student Union | Academic Department | School of ESE, Nanjing University

Sep 2016-Jun 2017

- Member of Academical Department
- Organized academic forums for the professors in School of ESE

PROFESSIONAL SKILLS

- ➤ Programming Languages: C/C++, Matlab, Python, Assembly language, Verilog
- TOEFL: 103/120 (Listening: 28, Reading: 28, Speaking: 21, Writing: 26)
- ➤ TOEFL MyBestTM Scores: 105/120 (Listening: 28, Reading: 28, Speaking: 23, Writing: 26)