Yanbo Dai

Phone: 86-18306007383 E-mail: ybdai7@gmail.com
Address: No.55 ,South University Town Road, Hightech District, Chongqing, China

EDUCATION

Chongqing University **CHONGQING, CN**
School of Microelectronics and Communication Engineering
Bachelor of Science in Electronic and Information Engineering ***09/2018- 07/2022***

- Overall GPA: 3.8/4.0, Weighted Average Mark: 90.24/100.00
- GRE: Verbal 162 Quantity 169 AW 3.0
- TOEFL: Reading 27, Learning 26, Speaking 22, Writing 26, Total 101

RESEARCH INTERESTS

- Machine Learning
- Deep Learning
- Signal Processing

PUBLICATION

- Hao Tang*, **Yanbo Dai***, Dongchu Zhao, Zhiwei Sun, Fuqiang Chen, Yiliang Zhu, Huaping Liang, Hailin Cao, Lianyang Zhang. **Deep Domain Adaptation for Predicting Intra-abdominal Pressure with Multichannel Attention Fusion Radar Chip**. **Adv. Intell. Syst. 2100209. https://doi.org/10.1002/aisy.202100209.**

RESEARCH EXPERIENCES

The Cao's Research Group (CQU) **CHONGQING, CN**

The research group of Prof. Hailin Cao from Chongqing University, working on new signal processing method and hardware structure that can be used in smart wearable/non-invasive healthcare device to address the soaring demands for medical care with both convenience and precision.

Undergraduate Research Assistant, Advisor: Prof. Hailin Cao ***02/2020-present***

- **Project: Wireless Detection of Abdominal Pressure Based on Domain Adversarial Neural Network (DANN)**
  - Operated the FMCW radar and built appropriate environment to get data captured by FMCW radar. Programmed in MATLAB to parse the data and extracted vital signal.
  - Built neural network based on DANN using Tensorflow and proposed a novel Pearson Coefficients Guided (PCG) layer to emphasize the informative features. The proposed method performed better than traditional methods through experiments on the collected data.
  - The essay which summarized the work of the project was submitted in Advanced Intelligent Systems recently.
  - Worked based on Python and MATLAB.

The Wu's Research Group (HKU) **HONGKONG, CN**

The research group of Prof. Yik-Chung Wu from Hongkong University, working on machine learning and signal processing.

Summer Internship Research Assistant, Advisor: Prof. Yik-Chung Wu ***07/2021- present***

- **Project: Deep Neural Network Compression Using Bayesian Tensorizing Neural Network**
  - Read Essays concerned with Bayesian tensorizing neural network which can determine the rank of the tensor automatically. Bayesian tensorizing neural network can be train from scratch and the pre-training time can be eliminated.
  - Understand the Bayesian tensorizing neural network deeply through writing codes which can decompose convolution layer based on tenor train format.
  - Worked based on Python and Pytorch.

PROJECTS

CQU **CHONGQING, CN**
Developer, Advisor: Prof. Yingcheng Li ***06/2020 - 08/2020***

- **Project: Handwriting Recognition Based on Deep Neural Network and HLS**
  - Developed a fast and high-precision deep neural network based on python, which could recognize the handwriting picture with digital number.
  - Implemented and designed the hardware using Verilog HDL and HLS on FPGA board.
  - Worked based on FPGA, Verilog HDL, HLS and Python.

SKILLS

- **Programming Languages:** Proficient in C, Python, Verilog HDL and MATLAB.
- **Deep Learning Libraries:** Proficient in Tensorflow and Pytorch.
- **Software Tools:** Proficient in MATLAB.

HONORS&AWARDS

- Second prize in National Undergraduate Mathematical Modeling Competition of Chongqing division ***2019 - 2020***
- Merit Student in Chongqing University (Top 5% in the School) ***2018 - 2019***