

Hanzhang Liu

UNDERGRADUATE, COMMUNICATION ENGINEERING, UESTC

EDUCATION **University of Electronic Science and Technology of China (UESTC)**, Chengdu, China
B.E., Communication Engineering (Yingcai Honors College) Sep. 17 - Jun. 21 (Expected)
GPA: 3.98/4.0
Selected Courses: Linear Algebra (96), Mathematical Analysis II (94), Physics II (92), Signals and Systems (96), Digital Design and MCU System (89), Digital Signal Processing (93)

AWARDS **University Scholarship 2018-2019**, UESTC
University Scholarship 2017-2018, UESTC

COURSE PROJECTS **Object Detection**
Supervisor : Prof. Yuming Jia Dec.2019 - Mar. 2020
- Learned object detection algorithms and implemented YOLOv3 on COCO dataset.

Dual-frequency Ultrasound Gesture Recognition System
Supervisor : Prof. Chang Wu Dec. 2019
Course : Digital Signal Processing
- Designed a real-time audio processing system that extracted feature sequences from ultrasound.
- Classified gestures based on kNN.
- Demonstrated the system on a laptop with a sokoban demo.

Microprocessor Design
Supervisor : Prof. Jianhao Hu May 2019 - Jul. 2019
Course : Digital Design and MCU System
- Developed a 4-issue, 6-stage pipelined microprocessor that performed sorting and matrix multiplication algorithm on Xilinx A7.
- Designed a vectorized sorting algorithm that is suitable for superscalar microarchitecture.
- Created a compact instruction set.
- Designed the datapath and control unit and coped with hazards.

COMPUTER SKILLS **Languages:** C, C++, Python, MATLAB, Verilog, Assembly (MIPS)
Tools and Frameworks: PyTorch, Git
