Haijun Xiong | CV

School of Electronic Information and Communications, HUST
Wuhan – China
+86-137-5594-8530 • ✉ xionghj@hust.edu.cn
Haijun-Xiong.github.io • Haijun-Xiong

Education Background

Huazhong University of Science and Technology (HUST)   **Wuhan, China**
Master of Engineering, Information and Communication Engineering   *Sept 2022–Jun 2025*

Huazhong University of Science and Technology (HUST)   **Wuhan, China**
Bachelor of Engineering, Electronic and Information Engineering   *Sept 2018–Jun 2022*
GPA: 3.86/4.0,   GRADE: 88.7/100,   RANK: 4/26

Awards & Achievements

First-class Scholarship for Postgraduates (HUST)	*Dec 2022*
Outstanding Graduate (HUST)	*Jun 2022*
Scholarship for National Encouragement	*Dec 2021*
Outstanding Communist Party Member (EIC)	*Jul 2021*
Outstanding Communist Youth League Cadre (HUST)	*May 2021*
Outstanding Student Cadres (HUST)	*Dec 2020*

Projects

Research on Intelligent Vision Algorithm for Fall Recognition   *Mar 2021–Jul 2022*

- First, YOLOv5 and ByteTrack are used to identify and track pedestrians in the surveillance.
- Then using the sliding window in the same ID sequence obtained, 16 consecutive frames of images are stitched together into a large image, which is sent to the fall recognition network. The backbone of the fall recognition model is ResNet18.
- I am mainly responsible for algorithm development and porting.

Competition on Human Identification at a Distance 2021   *Mar 2021–Jun 2021*

- The Multi-branch Diverse Region Feature Generator module (MDFG) is employed in both Set-level and Frame-level to generate visual clues in diverse regions for fine-grained feature learning;
- The Global and Micro Motion Capturing Module (GMCM) contains two parts: Micro-motion Template Builder (MTB) and Global-motion Template Builder (GTB). GMCM is proposed for global-local temporal feature learning.

Design of digital voltmeter based on MCS51 (C)   *Mar 2021–Jun 2021*

- Utilized C to achieve the 8-bit PCF8591 chip to convert the voltage signal collected by the MCS51 into a digital signal;
- Employed IIC to control LCD screen to display three and a half digits of the result;

- Adopted button for ranging conversions, and display positive or negative polarity and over-range errors

Languages & Computer Skills

English: CET-6 479

IT: Extensive knowledge of Linux, Python, C, C++ and could use Python packages including Pytorch, Numpy, pandas, Sciki-learn, Opencv, and so on fluently.

Publications

[1] Shiqi Yu, Yongzhen Huang, Liang Wang, Yasushi Makihara, Edel B García Reyes, Feng Zheng, Md Atiqur Rahman Ahad, Beibei Lin, Yuchao Yang, Haijun Xiong, et al. Hid 2021: Competition on human identification at a distance 2021. In *2021 IEEE International Joint Conference on Biometrics (IJCB)*, pages 1–7. IEEE, 2021.