Guangxin Jiang

Birthday: 2005.04 Phone: 178-5522-8820
Origin: Huoqiu Anhui Email: jgx@hust.edu.cn
Personal Website: igxjiang.github.io

EDUCATION

Huazhong University of Science and Technology (HUST) Sept. 2022- Present

Bachelor of Biomedical Engineering (Expected in July 2026) GPA: 4.17 of 5 ranking 6 of 58

Key Courses: CMOS Analog IC (86); Digital IC (90); Physics of Semiconductor Devices (91); Circuit Theory (97); Signal and Linear System (96); Analog Electronic Technology (85); Mathematical Physics Equation (97)

Honor: National Scholarship (1/58); National Encouragement Scholarship (1/28); HUST Merit Student (1/28); Excellent League Member; Second Prize in National College Student Mathematics Competition

PROJECT EXPERIENCE

Digital PET Imaging Lab IC Group Oct. 2024-Present

Research Assistant Advisor: Qingguo Xie (USTC IC & HUST WNLO BME)

- Reproduced a two-step Time-to-Digital Converter (TDC) circuit, where the first stage employs a single delay chain for coarse counting, and the second stage utilizes a vernier structure for fine counting.
- The circuit operates with a 100MHz clock signal and achieves time resolution of 20ps and a dynamic range of 10 ns. The basic delay units are controlled by the phase detector and charge pump which produce the locking voltage.
- Trying to add Time Amplifier in the measurement source and between the two-step TDC, I plan to submit a paper to the conference of ISCAS 2026 (If possible).

Machine learning-based early adolescent depression detection Apr. 2024-Jul. 2024

Project Manager Advisor: Zhiwei Wang (HUST WNLO)

- Based on the ECG and EEG multimodal data of patients with depression and healthy individuals, established a model which combines SVM and CNN–LSTM methods.
- Innovatively proposed the concept of "the proportion of depressive segments", which solved the problem of sample imbalance and effectively realized the screening and detection of early-onset depression in adolescents.

China Robotics and Artificial Intelligence Competition May. 2024-Jul. 2024

Project Member Advisor: Chao Wang (HUST OEI&WNLO)

- Passed the Hubei Provincial Competition, advanced to the National Competition and won National Excellent Award.
- Based on the Aelos humanoid standard platform, programming for actions of the robot, including walking, obstacle avoidance, box-holding, and stair-climbing, along with the corresponding servo debugging.

SKILLS

Cadence Virtuoso: schematic and layout design, DRC, LVS, pre/post-layout simulation.
Software: C++, Python, MATLAB, LaTeX, LTspice, Proteus, Keil, etc.
Language: Mandarin Chinese (Level 2B); English (CET-6: 511)
Certificate: NCRE Level3 (Network Technology).

ACTIVITY

ICAC Workshop 2025 Shenzhen China
Half-Marathon A1 event (2024Xiaogan 1:51:34; 2025Xiantao 1:44:23)
Volunteer: Conducted a 15-day summer teaching program in Laifeng Hubei in 2023 and volunteered in optics valley marathon, third municipal hospital, Hankou railway station, summer enrollment, etc. (250 hours in total).
Student Work: Served as a member of the University Student Social Practice Center and Youth League Committee.