Shangkun Li

Handan Campus, Fudan University, Shanghai, 200433, P.R. China

E-mail: 20307130215@fudan.edu.cn | Tel: (+86)15700300836 | Personal Site: https://shangkunli.github.io

EDUCATION

Department of Physics, Fudan University, Shanghai, China   Sept 2020 – Present

➢ B.E. in Physics, **Overall GPA: 3.81/4.0, Ranking: 2/112,** Major GPA: 3.89/4.0

➢ Courses Taken: Fundamentals of Digital Electronics, Reconfigurable Computing, Program Design, Introduction to Electronic Systems, Optics, Electrodynamics, Quantum Mechanics, Thermodynamics and Statistical Physics, Quantum Mechanics, etc.

AWARDS

➢ Academic Year 2021-2022, **National Scholarship** (Top 1%)

➢ Academic Year 2021-2022, **Pacemaker to Merit Student** (10 out of all undergraduates in Fudan University)

➢ Academic Year 2020-2021, **The First Prize Scholarship** (Top 5%)

➢ Academic Year 2020-2021, Merit Student

➢ Aug 2021, Grand Prize of the 12th China Undergraduate Physics Tournament (Ranking 2nd in China)

➢ Dec 2022, Third Prize of the 8th China Undergraduate Physics Experiment Competition

RESEARCH EXPERIENCES

Learning and Practice in CGRA (Coarse-grained Reconfigurable Architecture) | Research Assistant   Jan 2023 – Present

Advisor: Lingli Wang, professor, Deputy Director of EDA Research Institute, School of Microelectronics, Fudan University

➢ Learned reconfigurable computing knowledge

➢ Investigated the application of AI in CGRA acceleration

Extending the Recursive Function of HLS tool based on MLIR | Research Assistant   Aug 2022 – Dec 2022

Advisor: Lingli Wang, professor, Deputy Director of EDA Research Institute, School of Microelectronics, Fudan University

➢ Learned the process of compiling high-level language to assembly language and the syntax and framework of MLIR

➢ Proposed a scheme to extend the recursive function of the HLS (High-level Synthesis) tool based on MLIR

➢ Completed the iterative unfolding of 3 recursive benchmarks at the MLIR level

Automated Guided Vehicle based on Raspberry Pi | Team Member   Mar 2021 – Jun 2021

Supervisor: Yajie Qin, Associate Professor, School of Information Science and Engineering, Fudan University

➢ Completed the realization of the image recognition function based on Raspberry Pi and Python

➢ Designed an automated Guided Vehicle

Grand Prize of the 12th China Undergraduate Physics Tournament | Team Member   Aug 2021

Supervisor: Yongkang Le, Director of Physics Teaching Experiment Center, Fudan University

➢ Built a ferromagnet induction sensors and optimized related parameters

➢ Designed a circuit to measure wind speed based on thermistors

LEADERSHIP AND ACTIVITIES

Academic and Innovation Department, Student Union, Department of Physics | Director   Sept 2021 – Sept 2022

➢ Recognized for the Outstanding Student Leadership at Fudan

➢ Organized the defense of the Xiyuan Project and the Introduction Meeting of the Project Group in Physics

➢ Planned and organized scientific software training activities, including MATLAB, Python, Mathematica, and COMSOL.

The Science Debate Club | Vice President   Sept 2021 – Sept 2022

➢ Responsible for organizing various research skills training courses for the Department of Physics

Tengfei School, Fudan University | Teaching Assistant of the Forerunner Courses   Aug - Oct 2021 & Aug - Oct 2022

➢ Tutoring students in Mathematical Analysis, Program Design, and General Physics

SKILLS

➢ Basic program management skills: git, shell

➢ Programming Languages: C/C++, Python, Chisel, Verilog, MLIR, Mathematica, COMSOL

➢ Office Applications: Microsoft Office, Photoshop, Premiere Pro

➢ Languages: Chinese, English