YANG YANJUN

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EDUCATION

Tongji University Sept, 2017 - July, 2021
BEng. in Electronic Science and Technology *Shanghai China*

- Academic record: 84.8%
- Core units taken: Design and Analysis of Digital Integrated Circuits, Computer Architecture, Analysis and Design of Analog Integrated Circuits, Principles for Design of Integrated Circuit Chips, Principles of Semiconductor Device, Embedded Systems

Nanyang Technological University Aug, 2021 - present
Msc (Electronics) *Singapore*

- CGPA: 4.63/5.00
- Core units taken: Digital Integrated Circuits Design, Advanced Topics in Semiconductor Devices, Electromagnetic Compability Design, LED Lighting & Display Technologies

RESEARCH EXPERIENCE

Design of a hierarchical memory management mechanism Aug, 2021 - Jan, 2022
Tongji University *Part-time Internship*

- In charge of a hierarchical SRAM-flash interface design with page replacement algorithm
- Applying the design on an automobile-orientated Cortex-M3 MCU

CoNM: Core of Normal Microarchitecture Mar, 2021 - Jun, 2021
Tongji University *Graduation Design*

- Designed an original 50MHz RV32I CPU core with a four-stage pipeline and static prediction mechanism using Verilog
- Transplanted the core onto PYNQ-Z1 FPGA for successful verification

Digital Integrated Circuits Curriculum Design Jun, 2020 - July, 2020
Tongji University *Curriculum Design*

- Designed and analyzed a 32-bit quick adder embedded with three different structures using Cadence
- Produced an analysis report on hierarchy, implementation, verification and simulation results

A Single-layer Wideband Microwave Absorber with Reactive Screen, A Novel Design of Microwave Absorber for Reduction of Radar Cross Section Dec, 2019 - May, 2020
Tongji University *Second Author*

- In charge of HFSS antenna simulation and analyses of experimental data
- Published two academic papers accepted by IEEE AP-S/URSI 2020 as the second author

CURRENT PROJECTS

ReMap: design of an optimized logarithmic conversion circuit Aug, 2021 - present
Nanyang Technological University *Msc Dissertation Project*

- Researching on algorithm optimizations of a Mitchell-based logarithmic approximation method
- Implementing and evaluating corresponding integrated circuits

Transplanting a core design to CHISEL Oct, 2021 - present
Self-learning

· Learning CHISEL and transplanting previous CoNM project
· Evaluating potential addition of ISA modules

HONOURS AND AWARDS

Tongji University 1st Semester, 2017
Advanced Summer Internship Individual

· Awarded for the great performance during summer internship

Tongji University 1st Semester, 2019
Outstanding Student Cadre

· Awarded for the outstanding work as the minister of the Rights and Welfare Department in Students' Union

PROFESSIONAL SKILLS

Programming Languages

· Proficient in Verilog, VHDL
· Competent in C++, C
· Developing skills in CHISEL, Python

Professional Software

· Skilled in ModelSim, MATLAB
· Good command of Vivado, Synopsys, Cadence, Git, LaTeX
· Good knowledge of HFSS, ISE, Keil

Languages
Native in Chinese, proficient in English

· IELTS 8.0/9.0, equivalent to CEFR level C1

INTERESTS

Literature and languages, music, football