Fenze Feng

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Education Background

Shandong University, Qingdao, Shandong

Bachelor of Engineering in Micro/Nano Optoelectronic Science and Technology

***** Project Experience

1. National Intelligent Vehicle Competition – 5G Remote Control Track Mar 2024–Dec 2024

Python, C++, Linux Team Project, National Second Prize

- Maintained hardware architecture and conducted outdoor software debugging.
- Resolved auto-exposure issues for camera-based navigation in outdoor environments.
- Achieved 30fps high-speed autonomous navigation for smart vehicles.

2. Smart Grid Network Slicing Resource Allocation System in 5G Era May 2024–Jul 2025

Allocation Algorithm National Innovation Project, 2 Patent Applications Pending, Collaboration with Shandong Power Grid

- Developed a deep learning-based heuristic resource allocation algorithm.
- Implemented LSTM for traffic flow prediction.
- Achieved dynamic time-slot allocation using ACO algorithm combined with LSTM in simulations.

3. AI Research

Deep Learning, Python Individual Project

- Gaze estimation: Studied the trade-off between computational resources and accuracy in gaze estimation, with plans to develop a real-time estimation app.
- Interpretability: Explored the application of Concept Bottleneck Models (CBMs) in the medical domain.
- Assisted in creating a benchmark dataset for knowledge conflicts in multimodal large models.

4. FPGA-Based RISC-V RV32I CPU Design

FPGA Design Individual Project

- Designed 32-bit non-pipelined/pipelined RISC-V CPUs from scratch using Verilog.
- Designed a 200MHz 32-bit multiplier using Booth-4 encoding + Wallace Tree with 3-stage pipelining.
- Others: Clock, UART serial communication, DDS, Vending machine, etc.

\heartsuit Awards

3rd Place (North China Region), National Second Prize, National Intelligent Vehicle CompetitionDec 2024Provincial Second Prize, China Undergraduate Mathematical Contest in ModelingSep 2024Meritorious Winner(Top 7%), Interdisciplinary Contest in Modeling (ICM)Feb 2024Others: Outstanding Individual in Cultural & sports activities / in Innovation & Entrepreneurship/ in VolunteerService; 2*excellent Youth League Member; 20+ Sports Awards

Additional Information

- Language: English Proficient (CET-4: 478 IELTS: 6.0)
- GPA: 90.17/100
- Scholarships: 8 awards including National Encouragement Scholarship, Merit-based Scholarships etc.
- Core Courses: Digital/Analog Circuits, High-Frequency Electronics, Signals & Systems, Electromagnetic Waves, Solid-State Physics, Semiconductor Physics, Micro/Nano Fabrication, FPGA Practical Projects

Jun 2024–Present

2022 - Present

Feb 2025–Jun 2025