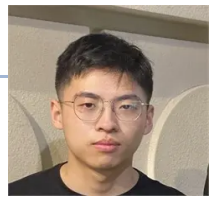
Si Yudong



19121726080 1505632943@qq.com https://github.com/ydongs

Education

Tongji University 2019.09 - 2022.03

Nantong University 2014.09 - 2018.06

Work Experience

AI Framework Engineer (Triton Compiler)@Intel. 2022.07 - 2025.07

Triton Compiler XPU Backend Development

- Feature Implementation
  - Developed GLM support, AOT compilation, TF32 SPIRV extensions
  - Built post-processing optimization pipeline (Postprocess Pass)
- Performance Optimization
  - Established first Triton-XPU Benchmark system (Softmax/GEMM/FA), supporting extendable handwritten libraries (XeTLA, CUTLASS, oneDNN)
  - Achieved >90% performance of Intel's XeTLA library in key kernels
- Bug Fixes
  - Resolved 35+ High-priority compiler backend issues

PyTorch Ecosystem Optimization

- CI/CD Innovation
  - Designed AWS Xeon-based Jenkins pipeline for PyTorch Inductor CPU Performance:
    - Automated collection of 200+ model performance metrics
    - Auto-generated performance reports

CUDA Test Engineer Intern@NVIDIA 2021.08 - 2021.11

CUDA Orin Simulator Practice

- Built CUDA safety & code coverage system for NVIDIA Orin t23x SOC
  - Automated test platform using VDK virtual test suite
  - Debugged failed/timeout test cases
  - Automated test image version tracking

Projects

Driver Fatigue Detection System | Computer Vision | 2021.07 | Academic Project

Multi-feature fusion model (eye/mouth pose + head Euler angles)

- Designed joint detection: blink count (EAR<0.25) + yawn detection (MAR>0.8)
- Deployed lightweight inference pipeline on embedded board
- Developed QT monitoring UI with visual fatigue alerts

Automotive Ambient Lighting Control | Embedded Systems | 2020.02 | Academic Project

Vehicle-grade programmable ambient light control system (touchscreen to LIN bus)

- Designed touchscreen UART command parser with custom instructions
- Implemented LIN bus unconditional frame protocol
- Created capacitive touch HMI interface

Skills

- **Languages**: C/C++, Python, Bash
- **Fundamentals**: Data Structures & Algorithms, OS, Computer Architecture
- **AI Infrastructure**: PyTorch,LLVM,MLIR,oneAPI,OpenCL,CUDA,SYCL,Jenkins,GitHub Actions,Docker