

Si Yudong

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🎓 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 OpenCL 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

