

TIAN-YU GUO 郭天宇

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🎓 EDUCATION

Sun Yat-sen University, Guangzhou, China 2022 – 2025 (expected)

Master student in Computer Science (CS)

Xidian University, Shaanxi, China 2018 – 2022

B.S. in Computer Science (CS)

👥 EXPERIENCE AND PROJECTS

Optimize GEMM step by step 2023

“GEMM MMA” first implementates a naive kernel of GEMM by CUDA mma.sync and then optimize it step by step. In the end, it achieves above 60% of peak performance relative to CUTLASS.

Teaching Assistant of “SYSU-DCS3013 : Computer Architecture” 2022

Release “SYSU-ARCH LAB” which focuses on simulators(gem5, GPGPU-Sim and Accel-Sim).

Design PTX-EMU 2022

“PTX-EMU” is an emulator for NVIDIA PTX.

You can use it to generate image by simulating rendering program.

Design CNN framework on CPU and GPU 2022

“CovNN” is a CNN framework support on CPU and GPU.

To validate its availability, CNNs are built to solve MNIST or CIFAR-10 training on GPU and achieve 98% or 70% accuracy respectively.

⚙️ SKILLS

- Programming Languages: C, C++, CUDA, Python, Java
- English: CET6(517/750)

♥️ HONORS AND AWARDS

Top 4.2% nationwide | Top 2.9% worldwide in “leetcode contest” 2023

The Second Prize Scholarship in SYSU 2022-2023

The Second Prize Scholarship in XDU 2018-2019, 2019-2020, 2020-2021

Top 7.58% in CCF CSP 2021

Provincial first prize of CUMCM 2020