Xuanteng Huang 黄軒騰

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🎓 Education

Sun Yat-sen University, Guangzhou, China   2022 - 2027 (expected)
Ph.D. student in Computer Science (CS)

Sun Yat-sen University, Guangzhou, China   2018 - 2022
B.S. in Computer Science (CS)

👥 Experience

ROCm Package Maintainer, Debian/GSoC'24   May 2024 – Now
Ship and maintain open source ROCm compute stack into Debian/Ubuntu and their alternatives. Bridge upstream developers and end users to provide flawless experiences with AMD GPUs in Debian.

GPU Arch Intern, Deep Learning, NVIDIA   September 2022 – December 2022
cuDNN upstream library kernel developer in GPU Compute Arch, Fast Kernel team. Achieve respect **9.51x and 12.54x speedups** for depthwise convolution kernels on Ampere and Hopper GPUs.

Heterogenous Computing Intern, ByteDance   May 2022 – August 2022
Design and implement a system-level CUDA profiling tool (proof-of-concept) based on NVIDIA CUPTI, with **0.5x lower overhead** than Nsight Compute with no explicit process injection.

📑 Publications

- [DAC '24] SMILE: LLC-based Shared Memory Expansion to Improve GPU Thread Level Parallelism
  Tianyu Guo, **Xuanteng Huang**, Kan Wu, Xianwei Zhang and Nong Xiao
- [ICCD '23] KeSCo: Compiler-based Kernel Scheduling for Multi-task GPU Applications
  Zejia Lin, Zewei Mo, **Xuanteng Huang**, Xianwei Zhang and Yutong Lu
- [ECCV '20] MINI-Net: Multiple Instance Ranking Network for Video Highlight Detection
  Fa-Ting Hong, **Xuanteng Huang**, Wei-Hong Li and Wei-Shi Zheng

⚙ Skills

- Programming Languages: C, C++, Python, CUDA
- Languages: English (CET6 602/750)

♡ Honors and Awards

CCF Elite Collegiate Award [CCF 优秀大学生/领航计划]	Octorber 2022
The First Prize Student Scholarship in SYSU ×2 (top 5%) [中山大学一等奖学金]	2020, 2021
Shenzhen Stock Exchange Scholarship [深交所奖学金]	September 2020
Fist Prize (Rank 1) of IndySCC'21 Student Cluster Competition	November 2021
Honorable Mention (Rank 4) of ISC'21 Student Cluster Competition	June 2021
Second Prize of ASC'20-21 Student Cluster Competition	January 2021