

# XUANTENG HUANG 黄軒騰

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## 🎓 EDUCATION

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

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

## 👤 EXPERIENCE

**ROCm Maintainer for Debian, Google Summer of Code 2024** May 2024 – Now  
Ship and maintain open source ROCm compute stack in the official package archive of 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 **9.51**× and **12.54**× 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 **0.5**× **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] October 2022  
SYSU President Scholarship [中山大学校长奖学金] September 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