

Résumé

CHUN-MU, WENG*

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I'm an enthusiastic competitive programmer who is eager to seek an opportunity to put all my strength into resolving real-life problems.

1 Academic Performance

- Currently a sophomore at National Tsing Hua University (Taiwan), majoring in **Computer Science** (expected to graduate in Jun., 2025)
- GPA of **4.21** Fall 2021, my 1st semester *with 28 credits*, ranking **2nd**/45 in class and **6th**/130 in department
Overall GPA of **4.09** in freshman year

2 Leaderships & Awards

2.1 Programming Contests

I started competitive programming since high school. Here are some prominent and prestigious contest I participated in college:

- 2021 National Collegiate Programming Contest Final (Taiwan), Team *Dkjistra*, **Honorable Mention**, ranked 28th.
- 2021 Interational Collegiate Programming Contest Asia Taipei Regional, Team *Dkjistra*, **Silver Award**, ranked 30th.
- 2022 National Collegiate Programming Contest Final (Taiwan), Team *DebugCat Capoo*, **Honorable Mention**, ranked 23th.
- 2022 Interational Collegiate Programming Contest Asia Taoyuan Regional, Team *Debug-Cat Capoo*, **Bronze Award**, ranked 39th.

2.2 High-Performance Computing Competitions

- 4 sophomores & 2 juniors teamed up
- Elected as the leader due to the background knowledge & ability to learn quickly
- Took on responsibilities and maintain the team

*<https://github.com/nevikw39/>

2.2.1 2022 HiPAC (Taiwan)

- 1st High Performance Application Competition by NCHC Taiwan
- Profiled and optimized the efficiency of calculating future green energy mechanisms using Quantum ESPRESSO software across 16 nodes of the cluster supercomputer *Taiwania 3*
- Won **3rd place** in the competition

2.2.2 2022 APAC HPC-AI Competition

- 5th Asia-Pacific High-Performance Computing & AI Competition¹, co-organised by HPC-AI Advisory Council, NSCC Sg. & NCI Au. and involved 25 teams from 12 countries
- Resolved tasks on 3 critical issues that leverage HPC & AI to develop solutions to human health & environmental sustainability
- Improved throughput between 16 NVIDIA V100 on 4 nodes of the supercomputer *Gadi* by 2.7 times via Active Message scheme of UCX Rendezvous protocol & optimization
- Increased accuracy of DL-based DNA sequence decoding and reduced training time using NVIDIA A100

Our team were granted the following honor:

- **1st place** crowned the overall champion trophy
- Best Big Data Analytics Performance Award
- A reserved slot at 2023 ISC in Germany

3 Experiences

3.1 Teaching Assistant

- Served as TA for INTRODUCTION TO PROGRAMMING II in Spring 2022 as a freshman
Expected to be TA again in Spring 2023
- Main task was to design online judge problems, which improved expertise & mastery in **data structures & algorithms**

3.2 Lecturer of Study Group

- Joined Teaching Div. of CS Student Assoc. in sophomore year
Contributed to CSST (*CS STudents*), a study group providing basic tutorials to students
- Lectured two ones on Linux terminal environments and Markdown & L^AT_EX

4 Skills

Languages C/C++, Python (main ones), JavaScript, Verilog (less-familiar), Go, Lua, Ruby, Rust, Java

Tools & Libraries Git, Unix-like OSs & shells, Docker, MPI, OpenMP, CUDA

¹https://www.hpcadvisorycouncil.com/2022-APAC-HPC-AI%20Competition%20Result-Announcement_PR.pdf