Chun-Mu, Weng*

nevikw39@m110.nthu.edu.tw https://github.com/nevikw39/

December 12, 2022

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)
- \bullet GPA of **4.21** Fall 2021, my 1st semester with 28 credits, ranking $2^{nd}/45$ in class and $6^{th}/130$ 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 International 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 23rd.
- 2022 International Collegiate Programming Contest Asia Taoyuan Regional, team *DebugCat Capoo*, **Bronze Award**, ranked 39th.

2.2 High-Performance Computing Competitions

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

^{*}https://www.linkedin.com/in/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 Competitionn¹, 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 & LATEX

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, Google Cloud

 $^{^{1} \}texttt{https://www.hpcadvisorycouncil.com/2022_APAC_HPC_AI\%20Competition\%20Result_Announcement_PR.pdf}$