

Dr. Po-Hsun Tseng

6+ years experience of large-scale software development with C programming on the Linux system throughout my Ph.D. journey.
Seeking a challenging and rewarding opportunity with low-level system programming (eg. device driver, Linux kernel, CPU architecture) to apply my skills at a fabless company.



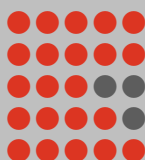
CONTACT

✉ zengbs@gmail.com
☎ +886 966 587 832
📍 Hsinchu, Taiwan
🌐 <https://github.com/zengbs>

SKILLS

Programming

C
Bash scripting
System programming
CUDA
Python



Operating System

Linux - user
Linux - kernel



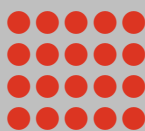
Architecture

ARM architecture



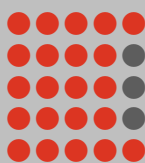
Software & Tools

Git
Vim
Gdb
Valgrind



Languages

Chinese (native)
English - writing
English - speaking
English - listening
English - reading



EDUCATION

- 📅 08/2016 - 06/2022
📍 National Taiwan University, Taiwan **Ph.D. in Computational Physics**
- Developed and implemented a new algorithm to reduce numerical error by a factor of 10^6 compared to conventional one. See Fig. 16 in (<https://arxiv.org/abs/2012.11130>).
 - A main contributor of the gammer-project on GitHub.
(<https://github.com/gamer-project/gamer/graphs/contributors>)
 - Designed a new approach to further promote the robustness of the GAMMER.
(<https://github.com/gamer-project/gamer/pull/60/files>)
 - Worked on improving the GAMER collaborated with Dr. Chiueh/Dr. Schive.
See the Section *References*.
 - Built and maintained the Linux cluster, NFS, and NIS in our lab.

WORK HISTORY

- 📅 12/2014 - 01/2016
📍 TDK corporation, Singapore **Circuit designer**
Design the circuit of surface acoustic wave(SAW) filters
- 📅 08/2013 - 08/2014
📍 Military Service

EDUCATION

- 📅 09/2011 - 07/2013
📍 National Taiwan University, Taiwan **M.Sc. in Physics**
- 📅 09/2006 - 07/2011
📍 National Central University, Taiwan **B.Sc. in Mathematics**

SOFT SKILLS


Nonverbal communication Active listening Open mindedness
Patience Mutual respect Teamwork Brainstorming
Collaboration



GENERAL SKILLS

Numerical algorithm Large-scale project cscope makefile
GNU autotools

PUBLICATIONS


An adaptive mesh, GPU-accelerated, and error minimized special relativistic hydrodynamics code

 **Po-Hsun Tseng**, Hsi-Yu Schive, Tzihong Chiueh

 2021  Monthly Notices of the Royal Astronomical Society Vol. 504, pp. 3298-3315
<https://arxiv.org/abs/2012.11130>

 [ADS](#)

The symmetry problem of the Fermi and eROSITA bubbles: A proof-of-concept study

 **Po-Hsun Tseng**, Hsiang-Yi Karen Yang, Hsi-Yu Schive, Tzihong Chiueh

 2022  preprint



TALKS

- An adaptive-mesh, GPU-accelerated, and optimally error-controlled special relativistic hydrodynamics code
Oral (remote), American Center for Physics College Park, U.S.A Mar. 2021
- A new and accurate code for simulating special relativistic hydrodynamics
Oral, Annual Meeting of the Physical Society of Taiwan, NPTU. Feb. 2020

REFERENCES

- Please send an appointment letter to request a call. 😊
- Dr. Tzihong Chiueh
Distinguished Professor, Institute of Astrophysics, National Taiwan University
 Taipei 10617, Taiwan
 chiuehth@phys.ntu.edu.tw
 +886 2 3366 8628
- Dr. Hsi-Yu Schive
Assistant Professor, Institute of Astrophysics, National Taiwan University
 Taipei 10617, Taiwan
 hyschive@phys.ntu.edu.tw
 +886 2 3366 8644
- Dr. Hsiang-Yi Karen Yang
Assistant Professor, Institute of Astronomy, National Tsing Hua University
 Hsinchu 30013, Taiwan
 hyang@phys.nthu.edu.tw
 +886 3 574 2953