

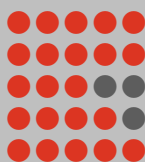
6+ years experience of large-scale software development with C programming on the Linux system throughout my Ph.D. journey. Seeking a challenging and rewarding opportunity with low-level system programming (eg. device driver, Linux kernel, CPU architecture) to apply my skills at a fabless company.



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

Programming

- C
- Bash scripting
- System programming
- CUDA
- Python



Operating System

Linux - user
Linux - kernel



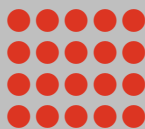
Architecture

ARM architecture



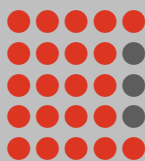
Software & Tools

- Git
- Vim
- Gdb
- Valgrind



Languages

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



📅 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>.
- Actively collaborated with Dr. Chiuieh/Dr. Schive (see the Section *References*) to develop the new algorithm.

12/2014 - 01/2016
TDK corporation, Singapore
Design surface acoustic wave(SAW) filters

08/2013 - 08/2014
Military Service

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

Nonverbal communication Active listening Open mindedness

Patience Mutual respect Teamwork Brainstorming


Collaboration



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. 😊
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