Haoran Dang （党浩然）

✉ danghr@outlook.com / 🖥 danghr.com

EDUCATION

- **Institute of Computing Technology, Chinese Academy of Sciences**　　　　2022-09 ~ Present
  M.Eng. Student in Electronic Information　　Supervisor: Prof. Dongrui Fan　　GPA: 3.81/4　　Beijing, China
  Also a student of University of Chinese Academy of Sciences, where the degree is to be conferred.
- **ShanghaiTech University**　　　　2018-09 ~ 2022-06
  B.Eng. in Computer Science and Technology　　GPA: 3.50/4　　Rank in major: 55/194 (28.4%)　　Shanghai, China

RESEARCH & PROJECTS

-Publications

- H Dang, M Wu, M Yan, X Ye, and D Fan, "**GDL-GNN: Applying GPU Dataloading of Large Datasets for Graph Neural Network Inference**," accepted by *Euro-Par 2024*.
- H Dang, C Ye, Y Hu, and C Wang, "**NobLSM: An LSM-tree with Non-blocking Writes for SSDs**," *DAC 2022*.
- D Wang, M Yan, Y Teng, D Han, H Dang, X Ye, and D Fan, "**A Transfer Learning Framework for High-accurate Cross-workload Design Space Exploration of CPU**," *ICCAD 2023*.

-Research

- **Lab of Graph Intelligent Machine** (GIMLab)　　HTCRC, ICT, CAS　　　　2021-12 ~ Present
  Director: Assoc. Prof. Mingyu Yan　　　　Beijing, China
  - Conducted research to accelerate GNN inference on multi-GPU platforms, developed and implemented an optimized GPU dataloading method based on partition, achieving a 59.9% performance improvement over baseline. (cf. GDL-GNN)
  - Developed an undergraduate FYP on optimizing GNN training, halving training times by implementing a multithreaded data loader across various GPUs. Awarded the SIST Outstanding Thesis.
- **Toast Lab**　　SIST, ShanghaiTech　　　　2021-07 ~ 2022-02
  Director: Assist. Prof. Chundong Wang　　　　Shanghai, China
  - Designed and implemented NobLSM's database component, using a modified ext4 interface to delay file deletions and minimize costly syncs. Demonstrated enhanced performance via benchmarking against SOTA LSM-trees. (cf. NobLSM)
- **Attitude Research Lab** (ARLab)　　SEM, ShanghaiTech　　　　2020-09 ~ 2021-09
  Director: Assoc. Prof. Lifeng Yang　　　　Shanghai, China
  - Participated in preparation of the book *Ethics and Morality in Information Science and Technology*. Provided suggestions on selecting publishing houses and participated in writing example chapters.

-TEACHING

- **Operating System I** (TA)　　　　ShanghaiTech　　Fall, AY 2021 ~ 2022

SKILLS

- **Programming Languages**: C/C++, Python, Shell, Verilog
- **Tools & Frameworks**: PyTorch, LaTeX, Jekyll
- **Languages**: Mandarin Chinese (native), English (fluent)
  - **TOEFL iBT**　　Score: 107 (Reading: 29, Listening: 27, Speaking: 23, Writing: 28)　　2024-04
  - **GRE General Test**　　Score: 328 (Verbal: 158, Quantitative: 170, Analytical Writing: 4)　　2022-08
  - **College English Test Band 6**　　Score: 572 (Listening: 198, Reading: 211, Writing: 163)　　2021-06

CERTIFICATES & AWARDS

- **2022 SIST Outstanding Thesis** (for final year project)　　ShanghaiTech　　2022-06
- **Excellent Individual of Industrial Practice in Class of 2018**　　ShanghaiTech　　2021-06
- **Excellent Individual of Social Practice in 2019**　　ShanghaiTech　　2019-11

VOLUNTARY SERVICE

- **20th Public Science Day of ICT, CAS**   Remote camera operator.   ICT, CAS   2024-05
- **"Sunflower Activity" - Haidian Hospital Volunteers**   Assistant in Service Center   ICT, CAS   2023-12
- **2020 Freshmen Enrollment**   Guidance in baggage claim of postgraduate students.   ShanghaiTech   2020-09
- **2020 Campus Opening Day**   Participated in device check and exam download.   ShanghaiTech   2020-07
- **2019 Admission Consultation**   Participated in admission consultation in Beijing.   ShanghaiTech   2019-06