

Jinhao Guo

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EDUCATION

Peking University

Bachelor of Computer Science

Beijing, China

Sept. 2022 - Present

- **Avg. Score**(until 2025 Spring Semester): 3.62/4
- Scores of some courses:
 - * Practice of Programming in C&C++ : 4/4
 - * Introduction to Computation (A): 3.98/4
 - * Introduction to Artificial Intelligence: 3.93/4
 - * Probability theory and statistics in information science: 3.91/4
 - * Design of Digital Logic: 3.88/4
 - * Algorithm Design and Analysis: 3.85/4
 - * Data Structure and Algorithm (A): 3.81/4

RESEARCH INTERESTS

- Operating System
- Storage System
- Machine Learning System
- Distributed System

RESEARCH EXPERIENCE

Peking University

Undergraduate Researcher, advised by Prof. Diyu Zhou

Beijing, China

July. 2024 - June. 2026(expected)

Research Topic: Operating Systems, Storage Systems, Machine Learning Systems

RESEARCH PROJECT

Merlin: Software Designed Cache for Multi-scene Trace Data.

Collaboration with Prof. Diyu Zhou, Peking University, Liujia Li, Peking University

- I worked with my collaborators to propose a software-designed cache for multiple trace datasets, with a lower miss ratio.
- I conducted experiments, analyzed data, and identified some features related to distinguishing access.
- I proposed a new strategy for segmenting access cycles, which is beneficial for our understanding of data features in multiple application scenarios.

RESEARCH PUBLICATIONS

Merlin: An Efficient Adaptive Cache Eviction Algorithm via Fine-Grained Characterization

Conditional Accepted

L. Li, J. Guo, Y. Fan, J. Wu, Z. Wang, J. Zhang, Y. Tamir, X. Wang, Y. Luo, D. Zhou

Cachence: Fine-Grained Cache Partitioning in Both Time and Space

L. Li, Y. Li, Y. Yao, J. Wu, Y. Fan, J. Guo, L. Zhu, J. Zhang, X. Wang, Y. Luo, Z. Wang, D. Zhou

COURSE PROJECTS

NoGo-AI

Introduction to Computation (A) Course Project

Apply AI algorithms to chess, including the Monte-Carlo algorithm, Machine Learning.

QT Creator Project - genshin-

Practice of Programming in C&C++ Course Project

Created a card battle game, using object-oriented programming with AI algorithm implemented to determine computer strategies

ICS-labs

Introduction of Computer Science(CMU 15-213) Course Project

Labs of ICS, making everyone clearer to the composition and operation of Computer.

HONORS & AWARDS

Scholarship

- 2022-2023 Excellent Research Award of the School of Information Science and Technology

TECHNICAL SKILLS

Languages: Mandarin (native), English (fluent).
Programming Languages: Proficient in C/C++, Python.

COMMUNITY & LEADERSHIP

Deputy Secretary

Youth Volunteer Service Association of Information Science and Technology College

September 2022 – June 2024

Peking University, Beijing

- Record volunteer activity expenses and coordinate volunteer activity affairs
- 2022-2023 Outstanding Volunteers
- 2022-2023 Outstanding Volunteer Service Group