An Zhong

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EDUCATION

Jilin University Changchun,China
B.S. in Computer Science and Technology *Sep.2021 - July 2025(expected)*

- **Overall GPA:** *3.85/4.00* **Rank:** *7/375*
- **Core Courses:** Computer Architecture (93),Operating System(91),Microcomputer System (96.7),Compiler Principle and Implementation(92.3),Computer Control of Technology (97),Foundation of Artificial Intelligence (100),Fundamentals of Programming(94),Probability and Statistics A(97)

RESEARCH EXPERIENCE

Acceleration of microarchitecture-level fault injection process for GPUs *Sep.2023 - April 2024*
Research Intern *Advisor:Jingweijia Tan,Jilin University & Guanpeng Li, University of Iowa*

- Developed models categorizing the hardware faults' early behaviors into GPU early fault manifestation models.
- Revealed the relationship between early fault behaviors with final fault outcomes.
- Proposed a fast and accurate error resilience evaluation framework GEREM for GPU microarchitecture.

A Unified Abstraction for Architectural Simulation and Implementation *Sep.2024 - Dec 2024*
Research Intern *Advisor:Jian Weng,KAUST*

- Conducted a literature review on architectural simulation and RTL design to identify challenges in cycle-accurate simulation and hardware alignment.
- Implemented an out-of-order CPU pipeline using Assassyn, achieving precise alignment between simulation and RTL.

PROJECTS

Estrus Detection in Beef Cattle via Multimodal Learning *Oct.2022 - May 2023*
National College Student Innovation Training Program *Advisor:Hui Kang, Jilin University*

- Reviewed multimodal learning approaches for binary classification and latest approaches for estrus detection.
- Designed a model using both behavioral data and image inputs for accurate estrus identification.

Enabling Software Compatibility on Domestic Operating Systems *Jan.2024 - April 2024*
cooperative project with Zhongke Fangde Software Co., Ltd. *Advisor:Huazhun Liu, Jilin University*

- Collaborated in the adaptation of open-source software on domestic OS.
- Developed RPM SPEC files and conducted build tests with Koji, ensuring cross-platform compatibility.

PUBLICATIONS

GEREM: Fast and Precise Error Resilience Assessment for GPU Microarchitectures
Jingweijia Tan*, Xurui Li, **An Zhong**, Kaige Yan, Xiaohui Wei, Guanpeng Li
IEEE Transactions on Parallel and Distributed Systems, 2024 (CCF-A), ***Under Major Revision***

Honors and Awards

- National Inspirational Scholarship (¥5000) *2022*
- Outstanding Student of the University (Top 5%) *2022, 2023, 2024*
- Provincial First Prize, National College Student Mathematical Modeling Competition (Top 10%) *2022*
- Second Prize, Huawei Software Elite Challenge (Beijing-Hebei Northeast Division) *2023*
- Huawei Scholarship Nominee (Top 5 in the University) *2024*

SKILLS

- **Programming:** C,C++,Python,Shell,SQL,CUDA
- **TOEFL:** 95 (overall score) Listening: 25 — Reading: 25 — Speaking: 22 — Writing: 23 Test date: Sep. 2024