Rixin Liu

CONTACT INFORMATION South China University of Technology Guangzhou Higher Education Mega Centre Panyu District, Guangzhou, 510006 Phone: +86 19956289958 rixin.liu.coder@gmail.com https://bugeater.space/

RESEARCH INTERESTS I hope to enhance the security, reliability and performance of current systems (Cloud Network System, ML System) through software modification (eBPF, framework update) or by leveraging emerging hardware (programmable switch, DPU).

EDUCATION

South China University of Technology - Project 985 B.S. Computer Science and Technology (11/164)

Sep. 2021 – Jun. 2025 GPA: 3.85/4.00

PUBLICATIONS

Themis: Efficiently Mitigating Congestion-Induced Fairness Disparities in Long-Haul RDMA Networks

Rixin Liu, Menghao Zhang, Zihan Niu, Zili Meng, Xiaohe Hu

SOSP' 24 Poster

PROFESSIONAL EXPERIENCE

Beihang University

Jun. 2024 - Now

Research Internship (Mentor: Menghao Zhang)

- **Investigated** relevant papers which provide RNIC performance isolation support in multi-tenant RDMA virtualization schemes to collaborate with Huawei.
- **Developed** solution *THEMIS* to efficiently deal with Congestion-Induced Fairness Disparities in Long-Haul RDMA Networks proposed by Prof. Zhang. *THEMIS* is a **fairness maintenance patch** with minimum modifications to existing DCs, via preemptive notification points and reaction points at external switch.

MIT-6.828 Graduate Operating System Coursework

Jan. 2024 – Mar. 2024

- **Strengthened** my passion for computer systems through the personal interest-driven pursuit of this course.
- Realized that ensuring malicious users do not disrupt the normal usage of innocent users developing a management framework that is easy to upgrade and manage is crucial in multi-tenant scenario.

AWARDS& HONOR

Huawei Scholarship (1/91)

Awarding Institution: Huawei Technologies Co., Ltd.

Date: Dec. 2023

Excellence Award

National Undergraduate Student Compiler System Design Contest Date: Aug. 2023

Second-Class Scholarship (7/87)

Awarding Institution: South China University of Technology Date: Dec. 2022

National Second Prize

National Undergraduate Mathematical Modeling Contest Date: May. 2022