

# SHUONING ZHANG

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## EDUCATION

University of Science and Technology of China(USTC)

Anhui, China

Applied Mathematics, Minor in Computer Science

2022 - 2024

- Overall GPA: 3.92/4.3      Rank: **19th/181** (Among all students majoring in mathematics at USTC)

## HONORS

- Zhang Zongzhi Sci-Tech Scholarship 2023
- Outstanding Student Scholarship, Grade 2 2024
- The Chinese Mathematics Competitions, 1st prize in Anhui Province 2024

## RESEARCH INTERESTS

Network Optimization, Algorithm, Deep learning

## PUBLICATIONS

**On the TPE Design to Efficiently Accelerate Hitless Reconfiguration of OCS-Based DCNs**

Authors: Qian Lv, Yuxiao Zhang, **Shuoning Zhang**, Ruoxing Li; Ke Meng, Bowen Zhang, Fuguang Huang; Xiaoliang Chen; Zuqing Zhu *IEEE JSAC Special Issue on Next-Generation Optical Communications and Networking*, Accepted, 2024.

**DRL-TPE: Learning to Optimize TPE of Optical Interconnects to Accelerate Hitless Reconfigurations OCS-Based DCNs**

Authors: Xiaoliang Chen, Wenbang Zheng, **Shuoning Zhang**, Xiaoyan Dong, Ke Meng, Zuqing Zhu Chen; Zuqing Zhu Accepted for Oral Presentation at the *2025 Optical Fiber Communications Conference(OFC 2025)*

## RESEARCH EXPERIENCE

**Research Assistant** Prof Zuqing Zhu's Research Group, USTC

2023-present

- Designed and analyzed optimization algorithms for hitless reconfiguration problem.
- Designed and implemented sophisticated simulation code to model complex systems and environments

## ACADEMIC PROJECTS

**Ultra-Large-Scale Optical Fiber Networks: Protection and Restoration Techniques**

Advisors: **Prof. Zuqing Zhu** (School of Information Science and Technology, USTC)

- Led a team in an innovative project funded by USTC with a budget of ¥20000, focusing on the development of protection and restoration techniques for services in ultra-large-scale optical fiber networks
- Orchestrated the design and execution of experiments to assess the robustness of network architectures against different failure scenarios, contributing to the understanding of network reliability and resilience.
- Designed algorithms for optimizing network reconfiguration to expedite service restoration following disruptions, enhancing network efficiency and service continuity.

## SKILLS

**Programming:** C, Python (Pytorch), LATEX, MATLAB

**English:** TOEFL: 99 (MyBestScore:102)