Shurang Wu

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Address: University of Science and Technology of China, No.96 Jinzhai Road, Hefei, Anhui, China

Education

University of Science and Technology of China (USTC), Hefei, Anhui, China

Sep 2021-Present

Bachelor of Science in Computer Science (currently final year, expected Jul 2025)

School of the Gifted Young; Hua Xia Talent Program in Computer Science and Technology

GPA (Overall): 3.90/4.3 (90.29/100) **GPA** (Core Courses): 4.12/4.3 **Ranking:** 9/214(~Top 4%)

Core courses (Part, x/100):

Computer Programming A (100, Top 1%), Operating Systems (Honor) (100, Top 1%),

Computer Networks (99, Top 1%), Fundamental of Artificial Intelligence (97), Guide to Formal Methods (96),

Introduction to Computing Systems (96), Computer Organization and Design (Honor) (95)

Research Experiences

Remote Research Assistant, Siebel School of Computing and Data Science, UIUC

Jul 2023-Aug 2023

Topological Anonymous Walk Embedding: A New Structural Node Embedding Approach.

Yuchen Yan*, Yongyi Hu*, Qinghai Zhou, Shurang Wu, Dingsu Wang, and Hanghang Tong. In Proceedings of CIKM'24

Advisor: Professor Hanghang Tong (Siebel School of Computing and Data Science, UIUC)

- Helped improving the design of the new embedding algorithm.
- Conducted experiments on the effectiveness evaluation of the new embedding method.

Research Assistant, Advanced Data Systems Laboratory, USTC

Sep 2023-Jul 2024

Resolve the bottleneck of distributed GNN training on large graphs. In preparation for submitting

Advisor: Assoc. Professor Cheng Li (School of Computer Science and Technology, USTC)

• Conducted research and experiments on the time bottleneck of distributed GNN training.

Research Assistant, Siebel School of Computing and Data Science, UIUC

Jul 2024-Present

Resolve the correctness problem in Kubernetes controllers' design and implementation.

Advisor: Assoc. Professor Tianyin Xu (Siebel School of Computing and Data Science, UIUC)

- Conducted systematic historical bug analyses of Kubernetes controllers, extracting valuable insights.
- Developed automated testing tools to improve the reliability and correctness of Kubernetes controllers.

Project Experiences / Teaching Experiences

ErisFS: A Comprehensive virtual filesystem for FreeRTOS. [As a group leader]

Mar 2023-Jul 2023

The first comprehensive virtual filesystem for FreeRTOS can extend to multiple filesystems and storage media.

Teaching Assistant of Computer Network, USTC

Sept 2023-Jan 2024

Core course for undergraduate students in the School of Computer Science and Technology, USTC

Teaching Assistant of Operating Systems (Honor), USTC

Mar 2024-Jul 2024

Honor course for undergraduate students in Hua Xia Talent Program in Computer Science and Technology, USTC

Awards

- USTC Excellent Freshman Scholarship, Bronze, 2021.12
- USTC Excellent Student Scholarship, Bronze, 2022.12; Silver, 2023.12
- USTC Talent Program Scholarship, Grade B, 2022.12; Grade A, 2023.12
- USTC Yu Qing Software Develop Competition, Silver, 2023.12

Skills

- (Natural) Language Fluency: GRE 327 (157V+170Q); TOEFL iBT 106 (30R+29L+23S+24W), JLPT N1
- Language Skills: Assembly Language, C, C++, JavaScript, Python, Swift, Go, Pascal, LATEX.
- Mathematics: Abstract Algebra, Mathematical Logic, Graph Theory, Calculus, Complex Analysis, Linear Algebra, Probability Theory, Stochastic Processes.