

SUMMARY

Undergraduate student interested in Cryptography and Secure Multi-Party Computation . I'm looking for opportunities participating in projects focused on practical applications or algorithm enhancements in multi-party secure computation or other related works.

EDUCATION

- **Shanghai Jiao Tong University** Shanghai, China
Bachelor of Computer Science Sept 2021 - Current
 - ▶ Member of John Hopcroft Honors Class, which is an elite CS program for top 10% talented students.
 - ▶ **Major GPA:** 3.58/4.3, 85.4/100.
 - ▶ **Selected Courses:** Advanced Algorithm (A+), Cryptographic Techniques in Blockchain (A+), Introduction to Cryptography (A), Computational Complexity (A), Optimization Methods (A), Information Theory (A), Computer Network (A), Data Mining (A), Operating System (A), Computer System (A), Programming Language Design and Implementation (A), Probability Theory (A), Algorithm (A), Image Processing and Computer Vision (A), Computer System Course Design (A)

EXPERIENCE

- **Crypto-System Laboratory, SJTU** Shanghai, China
≡ *Optimization and Design of The Oblivious Transfer Protocol* Oct 2023 - Current
 - Undergraduate researcher, supervised by Prof. Kang Yang.
 - Got familiar with crypto primitives and the security proof framework of secure multi-party computation protocols.
 - Got acquainted with crypto assumptions (DDH, LWE, etc.), Function Secret Sharing and Homomorphic Secret Sharing.
 - Now studying how to build the OT Protocol based on Public-Key Setup and studying UC security.

PROJECTS

Neural Style Transfer Shanghai, China
CS3964 Image Processing and Computer Vision Course Project Dec 2023

- Implement Neural Style Transfer based on Image Quilting and Texture Transfer.
- Implement Quick Neural Style Transfer based on VGG net.
- Discuss the difference between the Transfer algorithm based on fixed and arbitrary content. [📄 GitHub](#)

Implement Basic Functions of xv6 Operating System Shanghai, China
SE3357 Operating System Course Project May 2023

- Understand how xv6 switches threads, manages process' virtual memory space, etc.
- Get familiar with how system calls are implemented using traps and how to create new system calls.
- Implement page table, syscalls, and gain experience in re-designing code to increase parallelism. [📄 GitHub](#)

Solve Online bipartite matching with Release Time and Deadline and Research on coresets Shanghai, China
CS3936 Advanced Algorithm Course Project Dec 2023

- Analyze a greedy algorithm and solve the fractional matching problem with water-filling LP.
- Implement an LP solver to find the optimal solution to the water-filling function.
- Research on the mathematical techniques and great ideas involved in the construction of coresets. [📄 GitHub](#)

Implement Basic Crypto Protocols and structure of Block Chain Shanghai, China
CS3937 Block Chain Course Project Continuously Updating

- Implement RSA signature and ElGamal Encryption. [📄 GitHub](#)

HONORS AND AWARDS

Undergraduate Class Scholarship 2022,2023
Zhiyuan Honors Scholarship 2021,2022,2023

OTHER EXPERIENCE

Proficient with: C/C++/C#, Python, Linux, \LaTeX