

JIE XU

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Unit 3 659 Blackburn Road, Clayton, VIC 3168

EDUCATION

Faculty of Information Theory, Monash University, Melbourne, Australia

- Ph.D. of Post Quantum Cryptography(Lattice based cryptography) Sept.2023.8
Supervisor: Muhammed Esgin & Ron steinfeld

School of Mathematics, Renmin University of China, Beijing, China

- M.E. of Applied Mathematics Sept. 2020 - Jun. 2023
GPA:3.69/4.
Comprehensive ranking (National Scholarship:academic performance, scientific research ability & development potential):1/56.

School of Mathematics and Statistics, East China Normal University, Shanghai, China

- B.E. of Mathematics and Applied Mathematics Sept.2013 -Jun. 2017
GPA:3.34/4.

PUBLICATIONS

- Jie Xu, Zhiyong Zheng, Kun Tian, Man Chen. Two properties of prefix codes and uniquely decodable codes, DESIGN CODES and CRYPTOGRAPHY. <https://doi.org/10.1007/s10623-023-01253-1>.
- Jie Xu, Zhiyong Zheng, Kun Tian (2022) Low-Density Parity-Check Codes: Research Status and Development Direction.Journal of Information Security, 13, 257-271. doi:10.4236/jis.2022.134014.
- Zhiyong Zheng, Fengxia Liu, Wenlin Huang, Jie Xu, and Kun Tian(2022) A Generalization of NTRUEncrypt -Cryptosystem Based on Ideal Lattice.Journal of Information Security,13, 165-180. doi:10.4236/jis.2022.133010.
- Zhiyong Zheng , Man Chen, Jie Xu. (2021). On gauss sums over dedekind domains. International Journal of Number Theory. doi:10.1142/S1793042122500543.
- Muhammed F. Esgin and Ron Steinfeld and Erkan Tairi and Jie Xu (2024) LeOPaRd: Towards Practical Post-Quantum Oblivious PRFs via Interactive Lattice Problems. Cryptology ePrint Archive, Paper 2024/1615. <https://eprint.iacr.org/2024/1615>.

Master's Thesis

- Jie Xu. LWE cryptosystem and security analysis.

SCIENTIFIC RESEARCH INTERNSHIP EXPERIENCE

- The 11th Heidelberg Laureate Forum (HLF) 2024. (Only 200 young researchers with the recipients of the most prestigious awards in mathematics and computer science are invited worldwide.)
- Young Scholars Forum of the School of Cyber Science and Technology of Beihang University 2023. A total of 6 people were invited. I was the only first-year PhD student among them who was given this opportunity.
- The China Overseas Chinese Intellectual Development Conference 2023. A total of 50 overseas Ph.D. students or graduates were invited to this conference, and I was one of them.
- Cryptography intern at Beijing Research Institute of Datatent Technology Co., Ltd., mainly responsible for the algorithm formulation of SM2 based on elliptic curve threshold algorithm implementation, and solving mathematical and cryptographic problems encountered in engineering implementation.

- People's Bank of China Chengfang Jinke New Technology Research Department, Privacy Computing Intern, mainly responsible for privacy computing manuscript writing, proofreading, publishing papers and writing patents.

AWARDS & HONORS

- National Scholarship for Graduate Students 2022
- Jingdong Special Scholarship (7 masters regardless of major in the whole university will be awarded) 2022
- First Class Scholarship for Postgraduate Studies for 2 consecutive years 2021-2022
- Second Prize of National College Students Mathematical Modeling Competition 2016
- First Prize of China Undergraduate Mathematical Contest in Modeling in Shanghai Province 2016

SKILLS & HOBBIES

Software: Python, Matlabs

Language: Chinese(native), English(IELTS 6.5)

Hobbies: Playing badminton, running regularly, and singing.