Principal Investigator: Yongsoo Song (송용수)

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Webpage: https://yongsoosong.github.io/
Office: Room 501, Building 301 (by appointment)

Seoul National University (2005~2017)
Ph.D. in Mathematical Sciences (Cryptography)
B.S. in Mathematical Sciences

UC San Diego (2018~2019)
Postdoctoral Researcher, Department of Computer Science and Engineering

Microsoft Research, Redmond (2020~2021)
Senior Researcher, Cryptography and Privacy Research Group

Seoul National University (2021~Present)
Full-time Professor, Department of Computer Science and Engineering
Advanced Cryptography

✓ Traditional cryptography guarantees data privacy, integrity and authenticity; however, it is not sufficient to resolve the security and privacy issues in recent data science and industry.

✓ We study both theoretical and applied aspects of modern cryptographic techniques for distributed computation.

✓ We are particularly interested in design, implementation, and optimization of secure computation technology such as homomorphic encryption and multi-party computation.
Research Interests

Privacy-Preserving Machine Learning

✓ Advanced cryptography has a wide range of applications in industries and public services based on sensitive data such as recommendation system, biometric authentication, statistical analysis, and medical service.

✓ We aim to build privacy-preserving protocols for training and inference of machine learning models and address the security and privacy concerns in cloud computing.
Students & Application

✓ Office: Room 451-1, Building 301
✓ Current (August 2021): 2 PhD Students, 4 Interns

✓ I am always looking for motivated and passionate students with various backgrounds including computer science and mathematics.

✓ If you are interested in joining Cryptography and Privacy Lab, please contact me at least six months prior to applying for the graduate program.  
  (The application process usually starts in April / October)
Internship Program

✓ 저희 연구실에서는 항상 유급 인턴 프로그램을 운영하고 있습니다. 인턴십의 목적은 암호 분야 연구 및 랩 생활의 경험을 제공하여 대학원 진학과 전공 선택에 도움을 주고 동시에 지원자의 학습, 연구 역량을 평가하는 것입니다.

✓ 인턴기간 중 성과를 보인다면 우선적으로 선발할 수 있으며 Full-time 인턴 기간은 학위 기간에 포함됩니다.

✓ 인턴십은 대부분 여름/겨울에 진행되며 상황에 따라 연장되거나 중단될 수 있습니다.

✓ 인턴십 지원을 원한다면 email로 간략한 소개를 CV, 성적증명서와 함께 보내주시기 바랍니다.

✓ If you are a foreign student who is not currently in Korea, it may require substantial paperwork to participate in our internship program due to the visa application.