

CONTACT INFORMATION

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EDUCATION

2019-PRESENT **Ph.D Computer Science**, Cornell University
Under the supervision of Prof. Rafael Pass and Prof. Elaine Shi

2015-2019 **B.E Computer Science**, Tsinghua University
Admitted to Special Pilot CS Class a.k.a Yao Class (about 30 students admitted each year)

HONORS AND AWARDS

2021 Best Paper Award at CRYPTO'2021.

IN THE MEDIA

2021 Answer to thorny question could unlock internet security
Cornell Chronicle, CACM

2020 Randomness theory could hold key to internet security
Cornell Chronicle

PUBLICATIONS

1. Yanyi Liu, Rafael Pass. On the Possibility of Basing Cryptography on $\text{EXP} \neq \text{BPP}$. *41st Annual International Cryptology Conference, (CRYPTO)*, 2021. **Best paper award.**
2. Yanyi Liu, Rafael Pass. Cryptography from sublinear-time average-case hardness of time-bounded Kolmogorov complexity. *53rd Annual ACM Symposium on Theory of Computing (STOC)*, 2021.
3. Yanyi Liu, Rafael Pass. On One-way Functions and Kolmogorov Complexity. *61st Annual IEEE Symposium on Foundations of Computer Science (FOCS)*, 2020.
4. Rex Fernando, Ilan Komargodski, Yanyi Liu, Elaine Shi. Secure Massively Parallel Computation for Dishonest Majority. *Theory of Cryptography Conference (TCC)*, 2020.
5. Vipul Goyal, Yanyi Liu, Yifan Song. Communication-Efficient Unconditional MPC with Guaranteed Output Delivery. *39th Annual International Cryptology Conference, (CRYPTO)*, 2019.

MANUSCRIPTS

1. Yanyi Liu, Rafael Pass. On One-way Functions from NP-Complete Problems. *Electronic Colloquium on Computational Complexity (ECCC)*, (059), 2021.
2. Yanyi Liu, Rafael Pass. A Note on One-way Functions and Sparse Languages. *Electronic Colloquium on Computational Complexity (ECCC)*, (092), 2021.