

Luu The Loi (Loi Luu)

CONTACT INFORMATION

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INTRODUCTION

Loi Luu is Founder of Caliber, a web3 venture building studios to help founders build next web3 unicorns. He previously founded Kyber Network in 2017, an on-chain decentralised trading protocol for digital assets and now serves as the chairman of the board & managing the Venture Investment arm.

Loi earned his PhD in Computer Science from National University of Singapore, where he worked to improve the base technical layers, namely decentralisation, scalability and security for the public blockchain infrastructure. To date, his work benefits several blockchain companies and projects world wide and collectively they are worth tens of billions of US dollars.

Loi was also selected in the Forbes 30 under 30 list for Asia, and Top 10 Innovators under 35 for Asia Pacific by MIT Technology Reviews.

EDUCATION

- **National University of Singapore, Singapore**
Ph.D., Computer Science, August 2014 – January 2018
 - *Thesis*: “TOWARDS SECURE PUBLIC BLOCKCHAIN PROTOCOLS AT SCALE”
 - *Advisor*: [Dr. Prateek Saxena](#)
- **Vietnam National Univ., Hanoi, Vietnam**
B.S., Computer Science, August 2009 – June 2013
 - *GPA*: 3.62/4.0, Honor Programme, Highest Distinction
 - *Thesis*: “Implement Breath First Search and Experiment with Search Algorithms on KLEE”
 - *Thesis advisors*: [Dr. Hoang T. Anh](#)

SELECTED HONORS AND AWARDS

- **MIT Technology Review’s Innovators Under 35, Asia Pacific**, 2019.
- **Forbes Asia 30 Under 30, Finance & Venture Capital track**, 2018
- **Forbes Vietnam 30 Under 30**, 2018
- **Dean’s Graduate Research Excellence Award**, 2017
NUS School of Computing.
- **Microsoft Research Asia Graduate Fellowship**, 2016
- **President Graduate Fellowship**, 2014-2017
National University of Singapore.

PROJECTS

- **Elastico**. The first sharding protocol to scale up transaction rate in public blockchains.
 - Inspires [Zilliqa](#), a new public blockchain.
 - Commercialized and Deployed at an (undisclosed) financial institution in Aug 2016
- **Kyber Network**. An on-chain liquidity protocol that powers various cryptocurrency applications and raise 52 Million USD in September 2017.
- **Oyente**. The first open source analyzer for Ethereum smart contracts, used by various industry projects (e.g. Quantstamp, Augur, Melonport).

- **SmartPool.** An open source decentralized mining pool protocol for cryptocurrencies.

PEER-REVIEWED
PUBLICATION

1. Loi Luu, Yaron Velner, Jason Teutsch, Prateek Saxena . SMARTPOOL: Practical Decentralized Pooled Mining. *The 26th USENIX Security Symposium (UsenixSec'17)* (Acceptance rate 16.28%).
 - Launched as a community [project](#).
 - Deployed on the [main Ethereum network](#) and has found over 100 blocks and counting.
2. Loi Luu, Viswesh Narayanan, Chaodong Zheng, Kunal Baweja, Seth Gilbert, Prateek Saxena. A Secure Sharding Protocol For Blockchains. *The 23rd ACM Conference on Computer and Communications Security (CCS'16)* (Acceptance rate 16.5%).
3. Loi Luu, Duc-Hiep Chu, Hrishi Olickel, Prateek Saxena, Aquinas Hobor. Making Smart Contracts Smarter. *The 23rd ACM Conference on Computer and Communications Security (CCS'16)* (Acceptance rate 16.5%).
 - The [code](#) is opensource and maintained by MelonPort.
 - The paper is well received by the community. See this [Reddit post](#).
 - On the news: [CoinDesk](#).
4. Loi Luu, Jason Teutsch, Raghav Kulkarni and Prateek Saxena. Demystifying incentives in the consensus computer. *The 22nd ACM Conference on Computer and Communications Security (CCS'15)* (Acceptance rate 19.4%).
 - *The paper has influenced the future design of Ethereum cryptocurrency. See this [blog post](#).*
 - *Great discussion about the paper on [Reddit](#).*
5. Loi Luu, Ratul Saha, Inian Parameshwaran, Prateek Saxena and Aquinas Hobor. On Power Splitting Games in Distributed Computation: The Case of Bitcoin Pooled Mining, *The 28th IEEE Computer Security Foundations Symposium (CSF'15)* (Acceptance rate 34.3%).
6. Loi Luu, Shweta Shinde, Prateek Saxena and Brian Demsky. A Model Counter for Constraints Over Unbounded Strings, *The 35th annual ACM SIGPLAN conference on Programming Language Design and Implementation (PLDI'14)* (Acceptance rate 18.1%).
7. Loi Luu, . Smart Contracts Make Bitcoin Mining Pools Vulnerable. To appear at the *4th Workshop on Bitcoin and Blockchain Research (BITCOIN'17)*.

PROFESSIONAL
EXPERIENCE

1. Founder May 2023 - Now
Caliber Venture Studio
2. Founder May 2017 - Now
Kyber Network
3. Research Intern June 2017 - August 2017
Visa Research
4. Research Intern November 2016 - Jan 2017
Ethereum Foundation
5. PhD Candidate Aug 2014 - Jan 2018
School of Computing, National University of Singapore
6. Research Assistant Jul 2013 - Jul 2014
National University of Singapore

REFERENCES

Dr. Prateek Saxena (advisor)
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School of Computing
National University of Singapore
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Vitalik Buterin
Founder, Chief Scientist
Ethereum Foundation
Email: v@buterin.com