Gerui Wang

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EDUCATION

May 2022 - Ph.D. in Computer Science | Advisor: Prof. Pramod Viswanath

Aug. 2017 Department of Computer Science,

University of Illinois Urbana-Champaign

Jul. 2017 - Bachelor of Engineering in Computer Science & Technology

Aug. 2013 Institute for Interdisciplinary Information Sciences, Yao Class

Tsinghua University

EXPERIENCE

Now - | Blockchain Research Scientist

MAY 2022 Beijing Academy of Blockchain and Edge Computing, Beijing, China

Keywords: Blockchain, Research & Development

May 2022 – | Algorithm Engineer & Researcher

MAY 2021 Hash Laboratories Pty. Ltd., North Sydney, NSW, Australia

Keywords: Blockchain, Research & Development

MAY 2022 – Research Assistant, advisor: Prof. Pramod Viswanath

Aug. 2017 University of Illinois Urbana-Champaign

Keywords: Blockchain, Consensus, Distributed System

Spring 2020 | Teaching Assistant

University of Illinois Urbana-Champaign

Course: Principles of Blockchains

SUMMER 2019 | Research Intern, advisor: Prof. David Tse

Applied Protocol Research, Palo Alto, CA, USA

Keywords: Blockchain, Consensus, Distributed System

Spring 2016 | Visiting Student

Department of Computer Science, Cornell University

PUBLICATIONS

- [1] P. Sheng, **G. Wang**, K. Nayak, S. Kannan, and P. Viswanath. "Player-replaceability and forensic support are two sides of the same (crypto) coin". In: *International Conference on Financial Cryptography and Data Security*. Springer. 2023, pp. 56–74.
- [2] M. Fitzi, X. Wang, S. Kannan, A. Kiayias, N. Leonardos, P. Viswanath, and **G. Wang**. "Minotaur: Multi-Resource Blockchain Consensus". In: *Proceedings of the 2022 ACM SIGSAC Conference on Computer and Communications Security*. CCS'22. 2022.
- [3] P. Sheng*, **G. Wang***, K. Nayak, S. Kannan, and P. Viswanath. "BFT Protocol Forensics". In: *Proceedings of the 2021 ACM SIGSAC Conference on Computer and Communications Security*. CCS'21. 2021.
- [4] **G. Wang**, S. Wang, V. Bagaria, D. Tse, and P. Viswanath. "Prism Removes Consensus Bottleneck for Smart Contracts". In: *2020 Crypto Valley Conference on Blockchain Technology (CVCBT)*. 2020, pp. 68–77. DOI: 10.1109/CVCBT50464.2020.00011.

- [5] G. Fanti, L. Kogan, S. Oh, K. Ruan, P. Viswanath, and **G. Wang**. "Compounding of Wealth in Proof-of-Stake Cryptocurrencies". In: *Financial Cryptography and Data Security*. 2019, pp. 42–61. ISBN: 978-3-030-32101-7.
- [6] Q. Zhao, **G. Wang**, X. Yuan, and X. Ma. "Efficient and robust detection of multipartite Greenberger-Horne-Zeilinger-like states". In: *Phys. Rev. A* 99 (5 May 2019), p. 052349. DOI: 10. 1103/PhysRevA.99.052349.
- [7] C. Li, **G. Wang**, and G. De Melo. "Context-Based Few-Shot Word Representation Learning". In: 2018 IEEE 12th International Conference on Semantic Computing (ICSC). IEEE. 2018, pp. 239–242.

PROJECTS

XDC Consensus Engine DPoS 2.0
 Upgrading XDC network consensus to XDPoS 2.0
 https://arxiv.org/abs/2108.01420

Prism Smart Contracts

Design and implementation of a smart contract full-node client with the Prism consensus protocol https://github.com/wgr523/prism-smart-contracts

Prism: Scaling Bitcoin by 10,000x
 Design and implementation of a novel scalable blockchain system in Rust language
 https://github.com/yangl1996/prism-rust

Principles of Blockchains (a teaching assistant project)
 A project that helps students to build blockchain clients from scratch
 https://gitlab.engr.illinois.edu/ece598pv/ece598pv-sp2022

COMPUTER SKILLS

Languages (experienced): Rust, Go, Python

Languages: Scala, Java, C++, MATLAB.

LANGUAGES

ENGLISH: Fluent

CHINESE: Mother tongue

^{*} indicates equal contributions