

# HAOQIAN ZHANG

## Curriculum Vitae

Swiss Federal Institute of Technology Lausanne

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## Educational Background

- 2019-Now **Swiss Federal Institute of Technology Lausanne**, Switzerland  
Program: Doctoral in Computer and Communication Sciences, School of Computer and Communication Sciences  
GPA: 5.75/6.0  
Supervisor: Professor Bryan Ford
- 2017-2019 **Hong Kong University of Science and Technology**, Hong Kong  
Program: Master of Philosophy in Computer Science and Engineering, School of Engineering  
GPA: 3.83/4.3  
Supervisor: Professor Ke Yi
- 2013-2017 **Peking University**, Beijing, China  
Program: Bachelor of Computer Science, School of EECS  
Major GPA: 3.50/4.0  
Overall GPA: 3.44/4.0
- 2016 **National Taiwan University**, Taipei, Taiwan  
Exchange College: Electrical Engineering and Computer Science

## Publications

Haoqian Zhang, Mahsa Bastankhah, Louis-Henri Merino, Vero Estrada-Galiñasanes, and Bryan Ford, *Breaking Blockchain Rationality with Out-of-Band Collusion*, WTSC2023

Haoqian Zhang, Louis-Henri Merino, Mahsa Bastankhah, Vero Estrada-Galiñasanes, and Bryan Ford, *F3B: A Low-Latency Commit-and-Reveal Architecture to Mitigate Blockchain Front-Running*, Under submission, <https://arxiv.org/abs/2205.08529>

Haoqian Zhang, Louis-Henri Merino, Vero Estrada-Galiñasanes, and Bryan Ford, *Flash Freezing Flash Boys: Countering Blockchain Front-Running*, DINPS2022

Haoqian Zhang, Cristina Basescu, Bryan Ford, *Economic Principles of PoPCoin, a Democratic Time-based Cryptocurrency*, arXiv preprint, <https://arxiv.org/abs/2011.01712>

Haoqian Zhang, Yaocheng Zhao, Abhishek Paryani, Ke Yi, *Infnote: A Decentralized Information Sharing Platform Based on Blockchain*, Master Thesis 2019, <https://arxiv.org/abs/2002.04533>

## Experience

- 2009–2014 **Tyvj**, *Founder*, an Online Judge Platform for algorithm problems and competitions.  
**Introduction:** In 2012, it had become one of the largest online judge systems for algorithm competition in China, having more than 40,000 users, 300,000 page views per day and more than 2000 algorithm challenges.

- 2017 **University of Oxford**, *Oxford Martin School, Institute of New Economic Thinking*, Internship.  
**Topic:** Developed state of the art Economic Simulation for Bank of England and European Central Bank  
**Supervisor:** Professor J. Doyne Farmer
- 2016–2017 **Peking University**, *School of EECS, Department of Computer Science, Microprocessor Research and Development Center*, Research Assistant.  
**Topic:** Code Similarity Analysis Based on Control Flow Graph  
**Supervisor:** Professor Xianhua Liu
- 2014–2016 **Peking University**, *School of EECS, Department of Computer Science, Artificial Intelligence Lab*, Research Assistant.  
**Topic:** General Game Play, AI Battle Platform (Botzone.com) and Game Design  
**Supervisor:** Professor Wenxin Li
- 2014 **Nation Olympiad in Informatics 2014**, *Shenzhen, China*, Technical Staff.  
**Project:** Developing judge system and designing problems for the AI competition.

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## Teaching

- 2021-2023 **Decentralized Systems Engineering**, FALL 2021-2022, FALL 2022-2023, Swiss Federal Institute of Technology Lausanne, Teaching Assistant.
- 2017-2019 **ACM/ICPC Programming Team**, Hong Kong University of Science and Technology, Coach.
- 2018 **Honors Competitive Programming**, SPRING 2017-2018, Hong Kong University of Science and Technology, Teaching Assistant.
- 2017 **Compiler Lab (Honor Track)**, SPRING 2016-2017, Peking University, Teaching Assistant.

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## Awards

- 2019 PhD fellowships, EPFL
- 2019 Best Project Award, BETH: Blockchain School for Sustainability, ETH Zurich
- 2018 Best Paper Award, CONVR2018
- 2017,2018 Postgraduate Scholarship, HKUST
- 2014 Tung OOCL Scholarship of Peking University
- 2012 China Team Selection Competition for International Olympiad in Informatics, Bronze Medal
- 2012 Asia-Pacific Informatics Olympiad (China Region), Silver Medal
- 2011 Asia-Pacific Informatics Olympiad (China Region), Bronze Medal
- 2012 National Olympiad in Informatics, Silver Medal
- 2011 National Olympiad in Informatics, Bronze Medal
- 2012 National Olympiad in Informatics, ShanXi Province, Fourth Place

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## Languages

- Chinese: Native
- English: Fluent
- French: Basic
- Programming Languages: Proficient