# HAOQIAN ZHANG

Curriculum Vitae

# Educational Background

2019-Now Swiss Federal Institute of Technology Lausanne, Switzerland

Program: Doctoral in Computer and Communication Sciences, School of Computer and Com-

munication 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, Louis-Henri Merino, Vero Estrada-GaliÃsanes, and Bryan Ford, *F3B: A Low-Latency Commit-and-Reveal Architecture to Mitigate Blockchain Front-Running*, Under submission, https://arxiv.org/abs/2205.08529

<u>Haoqian Zhang</u>, Louis-Henri Merino, Vero Estrada-GaliÃśanes, and Bryan Ford, *Flash Freezing Flash Boys: Countering Blockchain Front-Running*, DINPS2022

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

<u>Haoqian Zhang</u>, 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: Gerneral Game Play, Al 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 Al competition.

## 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.

### 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

# Languages

Chinese: Native English: Fluent French: Basic

Programming Languages: Proficient