

# Cheng Wang

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## Education

### The University of Hong Kong

PhD, Computer Science

Advisor: Heming Cui

Thesis: Transparent and Efficient Fault Tolerance on High-Speed Datacenter Networking

Hong Kong, China

Sept. 2015 - Feb. 2020

### Cornell University

Visiting Researcher

Advisor: Robbert van Renesse, Hakim Weatherspoon

Ithaca, USA

June. 2019 - Oct. 2019

### Tongji University

B.Eng., Software Engineering

GPA: 4.6/5.0, ranking: 9/180

Shanghai, China

Sept. 2011 - July. 2015

## Publications

### Uranus: Simple, Efficient SGX Programming and its Applications

Jianyu Jiang, Xusheng Chen, Tsz On Li, **Cheng Wang**, Tianxiang Shen, Shixiong Zhao, Heming Cui, Cho-Li Wang, Fengwei Zhang  
15th ACM ASIA Conference on Computer and Communications Security (AsiaCCS'20)

### Fulva: Efficient Live Migration for In-memory Key-Value Stores with Zero Downtime

Jiewen Hai\*, **Cheng Wang\***, Xusheng Chen, Tsz On Li, Heming Cui, Sen Wang (\*co-first authors)  
38th IEEE International Symposium on Reliable Distributed Systems (IEEE SRDS'19)

### PLOVER: Fast, Multi-core Scalable Virtual Machine Fault-tolerance

**Cheng Wang**, Xusheng Chen, Weiwei Jia, Haoran Qiu, Boxuan Li, Shixiong Zhao, Heming Cui  
15th USENIX Symposium on Networked Systems Design and Implementation (USENIX NSDI'18)

### Effectively Mitigating I/O Inactivity in vCPU Scheduling

Weiwei Jia, **Cheng Wang**, Xusheng Chen, Jianchen Shan, Xiaowei Shang, Heming Cui, Xiaoning Ding, Luwei Cheng, Francis C. M. Lau, Yuexuan Wang, Yuangang Wang  
2018 USENIX Annual Technical Conference (USENIX ATC'18)

### APUS: Fast and Scalable PAXOS on RDMA

**Cheng Wang**, Jianyu Jiang, Xusheng Chen, Ning Yi, Heming Cui  
ACM Symposium on Cloud Computing 2017 (SoCC'17)

### A Fast, General Storage Replication Protocol for Active-Active Virtual Machine Fault Tolerance

**Cheng Wang**, Xusheng Chen, Zixu Wang, Youwei Zhu, Heming Cui  
IEEE 23rd International Conference on Parallel and Distributed Systems (IEEE ICPADS'17)

### TRIPOD: An Efficient, Highly-available Cluster Management System

**Cheng Wang**, Jingyu Yang, Ning Yi, Heming Cui  
7th ACM SIGOPS Asia-Pacific Workshop on Systems (APSys'16)

## Patent

### Non-Blocking Distributed Consensus in Hypervisor

**Cheng Wang**, Xusheng Chen, Heming Cui, Weifeng Shen, Long Bai, Shuzhan Bi  
PCT/CN2018/082225 (Owned by Huawei)

## Working Experience

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### **NEC Laboratories Europe**

*Research Scientist*

Advisor: Dr. Felipe Huici

Research topic: Unikernel-based prediction serving systems for machine learning

*Heidelberg, Germany*

*June, 2018 - Oct. 2018*

### **Masters of Arts Anwendungsentwicklung GmbH**

*Full Stack Developer*

*Hamburg, Germany*

*Sept. 2014 - Feb. 2015*

## Teaching Assistant

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**COMP3402 - System Architecture and Distributed Computing**

Spring 2016

**COMP3402 - System Architecture and Distributed Computing**

Spring 2017

**COMP3402 - System Architecture and Distributed Computing**

Spring 2018

**COMP3402 - System Architecture and Distributed Computing**

Spring 2019