

YUPENG ZHANG

CONTACT INFORMATION

3400 A.V. Williams Building,
University of Maryland,
College Park, MD, 20740

PHONE: 240-565-8204
WEB: <http://www.umiacs.umd.edu/~zhangyp>
EMAIL: zhangyp@umd.edu

RESEARCH INTERESTS

Applied Cryptography. Security and Privacy in Cloud Computing.

EDUCATION

University of Maryland, College Park, MD

Ph.D., in Electrical and Computer Engineering,

Sep. 2013 – May 2018 (expected)

Advisors: Charalampos (Babis) Papamanthou and Jonathan Katz

Chinese University of Hong Kong, Hong Kong

M.Phil., in Information Engineering,

July 2013

Advisor: Wing Shing Wong

B.S., in Information Engineering,

July 2011

PUBLICATIONS

1. **Yupeng Zhang**, Daniel Genkin, Jonathan Katz, Dimitris Papadopoulos and Charalampos Papamanthou, vSQL: Verifying Arbitrary SQL Queries over Dynamic Outsourced Databases. Accepted to IEEE Symposium on Security and Privacy (S&P) 2017 (to appear).
2. *Payman Mohassel and **Yupeng Zhang**, SecureML: A System for Scalable Privacy-Preserving Machine Learning. Accepted to IEEE Symposium on Security and Privacy (S&P) 2017 (to appear). (* denotes author names in alphabetical order)
3. **Yupeng Zhang**, Jonathan Katz and Charalampos Papamanthou, An Expressive (Zero-Knowledge) Set Accumulator. In *Proceeding of IEEE European Symposium on Security and Privacy (Euro S&P)*, 2017.
4. **Yupeng Zhang**, Jonathan Katz and Charalampos Papamanthou, All Your Queries Are Belong to Us: The Power of File-Injection Attacks on Searchable Encryption. In *Proceeding of 25th USENIX Security Symposium (USENIX Security 16)*, 2016.
5. Zhe Zhou, Tao Zhang, Sherman SM Chow, **Yupeng Zhang**, and Kehuan Zhang, Efficient Authenticated Multi-Pattern Matching in *Proceeding of the 2016 ACM on Asia Conference on Computer and Communications Security (AsiaCCS)*. 2016.
6. **Yupeng Zhang**, Jonathan Katz and Charalampos Papamanthou, IntegriDB: Verifiable SQL for Outsourced Databases. In *Proceeding of the 2015 ACM Conference on Computer and Communications Security (CCS)*, 2015.
7. **Yupeng Zhang**, Charalampos Papamanthou and Jonathan Katz, ALITHEIA: Towards Practical Verifiable Graph Processing. In *Proceeding of the 2014 ACM Conference on Computer and Communications Security (CCS)*, 2014.
8. Yi Qian, **Yupeng Zhang**, Xi Chen and Charalampos Papamanthou, Streaming Authenticated Data Structures: Abstraction and Implementation. In *Proceeding of the ACM Cloud Computing Security Workshop (CCSW)*, 2014.

9. **Yupeng Zhang** and Wing Shing Wong, Distributed Load Balancing in a Multiple Server System by Shift-Invariant Protocol Sequences. In *Proceeding of the IEEE Wireless Communications and Networking Conference (WCNC)*, 2013.
10. **Yupeng Zhang**, John Chapin and Vincent W.S. Chan, Failure of TCP Congestion Control under Diversity Routing. In *Proceeding of the IEEE Wireless Communications and Networking Conference (WCNC)*, 2011.

PROFESSIONAL ACTIVITIES

- Program Committee, World Wide Web Conference 2017 security and privacy track.
- Reviewer for PoPETs 2017.
- Student Program Committee, IEEE Symposium on Security and Privacy (S&P) 2016.
- External reviewer for: CCS 2015, 2016; NDSS2016; SCC2016; TISSEC2016; ACNS2015; ISC2014; WPES2014.

RESEARCH EXPERIENCE

Visa Research <i>Summer internship</i>	May 2016 to Aug. 2016 <i>Foster City, CA</i>
Mentor: Dr. Payman Mohassel	
RSA Laboratories, Boston <i>Summer internship</i>	May 2015 to Aug. 2015 <i>Boston, MA</i>
Mentor: Dr. Nikolaos Triandopoulos	
Massachusetts Institute of Technology <i>Charles Kao Research Exchange Student</i>	June 2010 - Sept 2010 <i>Cambridge, MA</i>
Mentor: Dr. Vincent W.S. Chan	

INVITED TALKS

- *Attacks on Searchable Encryption*
Cornell University, April 2016
DCAPS workshop (Maryland) February 2016
- *Verifiable Databases*
University of Pennsylvania, April 2017

AWARDS

Outstanding Graduate Assistant, University of Maryland	<i>May 2017</i>
Google PhD Fellowship	<i>April 2017</i>
Facebook Fellowship Finalist (38 out of 800)	<i>Jan 2017</i>
Future Faculty Program, University of Maryland	<i>Jan 2016</i>
CCS14,15, USENIX16 Student Travel Grant	<i>2014-2016</i>
College Certificate of Academic Merit, Chinese University of Hong Kong	<i>Sept 2011</i>
Deans list of Engineering, Chinese University of Hong Kong	<i>2007 - 2011</i>
Charles Kao Research Scholarship, Chinese University of Hong Kong	<i>June 2011</i>
Full scholarship for studying at CUHK, Chinese University of Hong Kong	<i>Sept 2007</i>

TEACHING EXPERIENCE

University of Maryland, College Park, MD

ENEE459P Parallel Algorithms (Grader)

Fall 2014

Chinese University of Hong Kong

Digital Communication (Teaching Assistant)

Spring 2012

Introduction to Probability (Teaching Assistant)

Spring 2011

Digital Circuit design laboratory (Teaching Assistant)

Fall 2011 & 2012