Zonghao Huang

Email: zonghao.huang@duke.edu | Homepage: https://zonghaohuang007.github.io/home/ Address: LSRC Building D101, 308 Research Drive, Durham, NC, 27708

RESEARCH INTEREST

• Theoretical Computer Science, Trustworthy Machine Learning, Cryptography, Differential Privacy, Distributed Optimization, ADMM

EDUCATION

Duke University	Durham, NC, USA
Ph.D. in Computer Science	Aug. 2020 - Present
Oklahoma State University M.S. in Electrical & Computer Engineering	Stillwater, OK, USA Jan. 2017 - Dec. 2019
Nanyang Technological University M.S. in Electronics	South West, Singapore Aug. 2015 - Jul. 2016
Xiamen University B.Eng. in Electronic & Information Engineering (rank: top 10%)	Xiamen, Fujian, China Sept. 2011 - Jul. 2015

RESEARCH EXPERIENCE

Research Intern

Department of Computer Science, The University of Hong Kong, Hong Kong, China

Oct. 2020 - Present

Research: Privacy-preserving Algorithms and Machine Learning, Advisor: Dr. Hubert T. H. Chan

Graduate Research Assistant

School of Electrical and Computer Engineering, Oklahoma State University, Stillwater

Jan. 2017 - Jul. 2019

Research: Differentially Private Distributed Machine Learning

PUBLICATIONS AND MANUSCRIPTS

Peer-Reviewed Published Papers:

- Zonghao Huang, Rui Hu, Yuanxiong Guo, Eric Chan-Tin, Yanmin Gong, "DP-ADMM: ADMM-based Distributed Learning with Differential Privacy", IEEE Transactions on Information Forensics and Security (TIFS), 2020.
- **Zonghao Huang**, Miao Pan, Yanmin Gong, "Robust Truth Discovery Against Data Poisoning in Mobile Crowdsensing", *Proceedings of the 2019 IEEE Global Communications Conference (GLOBECOM), 2019.*
- **Zonghao Huang**, Yanmin Gong, "Differential Location Privacy for Crowdsourced Spectrum Sensing", Proceedings of the 2017 IEEE Conference on Communications and Network Security (CNS), 2017.

• Manuscripts in Preprint:

• **Zonghao Huang**, Yanmin Gong, "Differentially Private ADMM for Convex Distributed Learning: Improve Accuracy with Multi-Step Approximation", *arXiv* preprint, 2020.

AWARDS AND HONORS

• Duke CS Ph.D. Fellowship, Department of Computer Science, Duke University, USA	2020 - 2022
• Student Travel Grant for IEEE CNS 2017, National Science Foundation and Army Research Office, USA	2017
• First-Class Graduate Scholarship of Academic Excellence, Xiamen University, China	2015
• Graduate Scholarship of Recreation and Sports Excellence, Xiamen University, China	2015
• Second-Class Scholarship of Academic Excellence, Xiamen University, China	2014
• First-Class Scholarship of Academic Excellence, Xiamen University, China	2013, 2012

TEACHING EXPERIENCE

ECEN 4024 Senior Design 2 School of Electrical and Computer Engineering, Oklahoma State University, Stillwater

Fall 2019

ACADEMIC ACTIVITIES

• Reviewer for Conference Manuscript Submissions :

• IEEE INFOCOM 2018, IEEE ICC 2018, IEEE CNS 2018.

PROGRAMING SKILLS AND LANGUAGES

- Programming: MATLAB (proficient), C (good), Python (good), Latex (proficient)
- Languages: English (proficient), Chinese (native), Cantonese (native)