Hongyi Wang

PERSONAL DETAILS

Address 3533, 1415 Engineering Dr, Madison, WI, 53706

Phone (608) 772-0283

Email hongyiwang@cs.wisc.edu

EDUCATION

Ph.D. Computer Sciences

2016-present

University of Wisconsin-Madison

• Research Interests: large-scale machine learning, optimization, distributed systems

BSc. Electronic and Information Engineering

2012-2016

Hangzhou Dianzi University (HDU)

• **GPA**: 4.8/5.0 (93.3/100)

• Ranking: 1/250

• Advised by: Prof. Kaixin Song and Prof. Zhonghai Zhang

• Research Interests: RF Circuits, Wireless Sensor Network, Wireless Communication

WORK EXPERIENCE

Research Assistant

2017-present

Electrical and Computer Engineering at UW-Madison, supervised by Prof. Dimitris Papailiopoulos

Working on research involves machine learning, parallel and distributed algorithm

Research Assistant

2016-2017

Visual Computing Lab of CS at UW-Madison, supervised by Prof. Michael Gleicher

Worked on UW2020 Discovery Initiative project *Physically-Responsive Collaborative Robot Manipulation*, funded by Wisconsin Alumni Research Foundation (WRAF)

HONORS & AWARDS

- Student Travel Award, ICML2018, 2018
- Outstanding undergraduate thesis of HDU, 2016
- National Scholarship of China (Top 2%), 2015
- Huawei Scholarship (by Huawei Technologies Co., Ltd), 2015
- First-Class Scholarship for Outstanding Students of HDU (Top 5%), 2012-2015

PUBLICATIONS

Preprints:

- L. Chen, **H. Wang**, J. Zhao, D. Papailiopoulos, and P. Koutris. "The Effect of Network Width on the Performance of Large-batch Training", *Submitted*. [PDF]
- **H. Wang**, S. Sievert, Z. Charles, D. Papailiopoulos, S. Wright. "Atomo: Communication-efficient Learning via Atomic Sparsification", *Submitted*. [PDF]

Conference:

- L. Chen, **H. Wang**, Z. Charles, and D. Papailiopoulos. "Draco: Robust Distributed Training via Redundant Gradients", *Thirty-fifth International Conference on Machine Learning* (ICML2018). [PDF]
- L. Chen, **H. Wang**, and D. Papailiopoulos. "Draco: Robust Distributed Training against Adversaries" *SysML* 2018 [PDF].
- G. Subramani, D. Rakita, **H. Wang**, J. Black, M. Zinn, and M. Gleicher. "Recognizing Actions during Tactile Manipulations through Force Sensing", *IEEE/RSJ International Conference on Intelligent Robots and Systems* (IROS) 2017 [PDF][Project Website].

SKILLS

Programming C/C++, Python, Scala, Java, MATLAB

Other TensorFlow, PyTorch, MXNet, MPI, Spark, AWS, ROS, Moveit

Hardware RF Circuit Design, PCB Design, Embedded Systems