Nuda (Tony) **Zhang**

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Education

University of Michigan   *Ann Arbor, MI*
PHD PRE-CANDIDATE IN COMPUTER SCIENCE   *Aug 2019 - Present*
Supervised by Manos Kapritsos

Cornell University   *Ithaca, NY*
B.A. IN COMPUTER SCIENCE AND MATHEMATICS   *Aug 2015 - Dec 2018*

Peer-Reviewed Publications

PODC'20   Brief Announcement: On the Significance of Consecutive Ballots in Paxos,
               *Eli Goldweber, **Nuda Zhang**, Manos Kapritsos*

Relevant Experience

University of Michigan at Ann Arbor   *Ann Arbor, MI*
GRADUATE RESEARCHER   *2019 - Present*
- Studying the art of reliable distributed systems, supervised by Manos Kapritsos
- Work on formal verification of distributed systems

Apple   *Remote*
INTERN   *Summer 2021*
- Developed a multi-partition transaction protocol for Apache Cassandra based on Egalitarian Paxos
- Derived a formal proof of correctness for the protocol
- Implemented network partition simulations for prototype in Jepsen Maelstrom

Oracle   *Redwood Shores, CA*
SOFTWARE ENGINEER   *2019*
- Work on the TimesTen in-memory database system

Cornell University   *Ithaca, NY*
UNDERGRADUATE RESEARCH ASSISTANT   *2018*
- Work on state machine replication and Byzantine distributed transaction systems,
  supervised by Robbert van Renesse and Lorenzo Alvisi

Institute of High Performance Computing   *Singapore*
SUMMER RESEARCH INTERN   *2017*
- Work on cancer cell detection using computer vision techniques

Teaching Experience

CS 4820: Introduction to Analysis of Algorithms   *Cornell University*
TEACHING ASSISTANT   *2018*

CS 2110: Object-Oriented Programming & Data Structures   *Cornell University*
RECITATION INSTRUCTOR   *2017 - 2018*

Activities

Computer Science and Engineering Graduate student organization

University of Michigan at Ann Arbor

Tea Chair

2020 - Present

- Organize weekly tea socials, among other service to the graduate student body

Association of Computer Science Undergraduates

Cornell University

Research Team Lead

2017-2018

- Led the Undergraduate Reading Group initiative, focusing on exposing underclassman to seminal research not taught in introductory classes
- Organized campus-wide events such as tech workshops and the semesterly student-faculty luncheon

Honors & Awards

2018	**Participant**, Cornell, Maryland, Max Planck Pre-doctoral Research School	*Saarbrücken, Germany*
2015-18	**Recipient**, Dean's List, all semesters	*Cornell University*
2013-14	**National Serviceman**, Completed 2 years of full-time National Service	*Singapore*
2013	**Recipient**, Singapore A*STAR National Science Scholarship (declined offer)	*Singapore*
2011	**Silver Medal**, 24th International Young Physicists' Tournament	*Tehran, Iran*

Technical Reports

arXiv:2006.01885   On the Significance of Consecutive Ballots in Paxos,

*Eli Goldweber, **Nuda Zhang**, Manos Kapritsos*