# ZONGSHUN ZHANG

zhangzs@bu.edu ⋄ http://cs-people.bu.edu/zhangzs/

## EDUCATION

**Boston University - USA**                                        *Aug. 2019 - present*
*Ph.D. in Computer Science (cGPA: 3.75/4)*
Advisor: Abraham Matta
**University of Minnesota - USA**                              *Aug. 2015 - May. 2019*
*B.S. in Computer Science (cGPA: 3.70/4)*

## TECHNICAL SKILLS

**Languages:** Python, Java, C++, C, R, HTML, CSS, MySQL, JavaScript
**Others:** Linux/Unix, PyTorch, Kubernetes, Docker, Redis, Knative, TCP/IP, AWS Lambda, AWS EC2, GENI testbed, Chameleon Cloud, MATLAB, Apache Spark, Apache Flink, TensorFlow, PySyft, PyGrid, Apache Thrift.

## EXPERIENCE

**Boston University - USA**                                        *Sept. 2019 - present*
*Graduate Research Assistant*
- Working on devising novel schemes for efficient and cost-effective resource provisioning for cloud applications.
- Researching novel architectures for efficient deep neural networks training considering model and data privacy.
- I have published my recent research works at IEEE & ACM venues.[1]
**Adobe Inc. - USA**                                              *May. 2022 - Sept. 2022*
*Research Engineer Intern*
- Researched and proposed resource allocation strategies for GPU-intensive systems.
- Evaluated proposed strategies for system-utilization and cost.
**University of Minnesota - USA**                              *Mar. 2018 - May 2019*
*Research Assistant*
- Reviewed the literature to devise evaluation metrics for stream processing engines.
- Tested *Apache Flink* using our evaluation metrics to benchmark its performance.

## PUBLICATIONS

- Valeria Turina, **Zongshun Zhang**, Flavio Esposito, Ibrahim Matta. **"Federated or Split? A Performance and Privacy Analysis of Hybrid Split and Federated Learning Architectures"** *IEEE International Conference on CLOUD Computing, 2021, Virtual.*
- Ali Raza, **Zongshun Zhang**, Nabeel Akhtar, Vatche Isahagian, Ibrahim Matta, **"LIBRA: An Economical Hybrid Approach for Cloud Applications with Strict SLAs"** *IEEE International Conference on Cloud Engineering (IC2E), 2021, Virtual.* (Best Paper Award!)
- Valeria Turina, **Zongshun Zhang**, Flavio Esposito, Ibrahim Matta. **"Combining split and federated architectures for efficiency and privacy in deep learning"** *ACM International Conference on emerging Networking EXperiments and Technologies 2020, Virtual.*

## AWARDS & HONORS

- Received Ph.D. Fellowship from Boston University.
- Dean's list for multiple semesters at **University of Minnesota**.
- Best Paper Award at *IEEE IC2E2021.*

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[1]Detailed description of my projects/publications can be found on my **personal webpage.**