Yanzhao Wu

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EDUCATION Georgia Institute of Technology, Atlanta, Georgia, USA

■ Ph.D. student in Computer Science

Aug 2017 – May 2021 (expected)

• Area: Big Data Systems

• Focus: Deep Learning & Big Data Systems.

• Cumulative GPA: 3.81 / 4.00

University of Science and Technology of China (USTC), Hefei, Anhui, China

Bachelor of Computer Science and Technology

Sep 2013 - Jul 2017

Graduated with Honors.

• Cumulative GPA: 3.80 / 4.30

RESEARCH EXPERIENCE

Experimental Analysis and Optimization of Deep Learning Frameworks

Distributed Data Intensive Systems Lab, Georgia Tech

Aug 2017 – Sep 2018

- Supervisor: Prof. Ling Liu
- Focus: Deep Learning Frameworks, Performance Analysis
- Goal: Analyze the hyper-parameters and basic components of Deep Learning and Optimize Deep Learning Frameworks by tuning data-related and hardware-related parameters.
- Achievement: Benchmarking Deep Learning Frameworks: Design Considerations, Metrics and Beyond (ICDCS'18)

Accelerating Deep Learning with Direct-to-GPU Storage

• Storage Systems Research Group, **IBM Research**

May 2018 – Aug 2018

- Mentors: Amit Warke, Dr. Daniel Waddington
 - Focus: Storage Systems, Deep Learning Frameworks
 - Achievement: Integrated the Direct-to-GPU storage system into Caffe to obtain over 2× performance improvement by reducing the overhead of data transmission.

DeepEyes: A Deep Learning Powered Localization System with Multi-modal Sensors

Distributed Data Intensive Systems Lab, Georgia Tech

Aug 2017 – May 2017

- Supervisor: Prof. Ling Liu
- Focus: Localization, Deep Learning
- Achievement: Implemented an out-door/in-door localization system without requiring the common localization infrastructure, such as GPS, cellular network, and WiFi, with the help of deep learning models.

Parallel Graph Search Algorithms Analysis & Design

National High-Performance Computing Center (Hefei), USTC

Feb 2017 – Aug 2017

- Supervisor: Prof. Yun Xu
- Focus: Parallel Graph Search Algorithms, Breadth-First Search (BFS)
 Achievement: Designed a new parallel BFS algorithm with better porf
- Achievement: Designed a new parallel BFS algorithm with better performance and load balance.

Detecting Large-gap Code Clones

National High-Performance Computing Center (Hefei), USTC

Sep 2015 - Jul 2017

- Supervisor: Prof. Yun Xu
- Focus: Source Code Processing & Indexing, Edit Distance, Detection Algorithms
- Achievement: CCAligner: a token based large-gap clone detector (ICSE'18).

Summer Research Internship on Automatic Verification

School of Computer Science, University of Birmingham

Jul 2016 – Aug 2016

- Supervisor: Prof. David Parker
- Focus: LTS (Labeled Transition Systems) Model Checker, Game Model Checker
- Achievement: Implemented LTS model checker and Game model checker for PRISM, a widely applied probabilistic model checker for analysis of systems, to enable it to support non-probabilistic models further.

PUBLICATION

- Ling Liu, <u>Yanzhao Wu</u>, Wenqi Wei, Wenqi Cao, Semih Sahin, and Qi Zhang. "Benchmarking Deep Learning Frameworks: Design Considerations, Metrics and Beyond." In 2018 IEEE 38th International Conference on Distributed Computing Systems (ICDCS), pp. 1258-1269. IEEE, 2018. (ICDCS'18)
- Pengcheng Wang, Jeffrey Svajlenko, <u>Yanzhao Wu</u>, Yun Xu and Chanchal K. Roy. "CCAligner: a token based large-gap clone detector." In Proceedings of the 40th International Conference on Software Engineering, pp. 1066-1077. ACM, 2018. (ICSE'18)
- Wenqi Wei, <u>Yanzhao Wu</u>, and Ling Liu. "DeepEyes: Integrating Deep Learning and Crowd Sourcing for Localization" In Southern Data Science Conference, 2018. (SDSC '18 Research Track Poster)

SKILL

- Linux: Proficient with Linux
- Programming Skills: C, C++, Python, JavaScript, Java, Go, OpenMP, MPI, CUDA, SQL
- Tools: TensorFlow, Caffe, Torch, MXNet, Hadoop, Spark, LLVM, Git, Subversion, PRISM, LATEX