

SHI Ziji

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ACADEMIC QUALIFICA- TIONS

National University of Singapore Jan 2021 - Present
Doctor of Philosophy, Computer Science

- Topics: Distributed Machine Learning, High Performance Computing
- Advisor: Asst. Prof. You Yang

Nanyang Technological University Aug 2015 - May 2019
Bachelor of Engineering, Computer Science

- Honours (Distinction) with an elective focus in Artificial Intelligence and an elective focus on Data Science and Analytics

EMPLOYMENT HISTORY

Research Intern Jan 2021 - Present
Alibaba DAMO Academy

- Participant of Alibaba Talent Program, a joint Ph.D. program between DAMO Academy and NUS.
- Supervisor: Dr. Zeng Kai

Research Assistant Oct 2019 - Nov 2020
Nanyang Technological University, Singapore

- Researched on domain generalization techniques for person re-identification.
- Supervisor: Assoc. Prof. Chen Change Loy

Machine Learning Research Intern May 2019 - Aug 2019
Apple Inc., Seattle, U.S.A.

- Worked on performance modelling of large-scale distributed learning algorithms.
- Supervisor: Haijie Gu and Pulkit Agrawal.

Algorithm Researcher Intern Sep 2018 - Mar 2019
SenseTime, Singapore

- Contributed to the development of a low-latency object recognition SDK.
- Explored edge inference using Nvidia TX2 DevKit.

Junior Research Assistant Apr 2018 - Jul 2018
NUS-TUM Joint Lab (TUMCREATE), Singapore

- Implemented a module to simulate electric bus activities for public transportation research.
- Identified and optimized several performance bottlenecks, leading to 20% overall speedup.

PUBLICATION

Domain Adaptation for Degraded Remote Scene Classification
J. Yang*, H. Chen*, Y. Xu, **Z. Shi**, R. Luo, L. Xie, R. Su. Invited session, International Conference on Control, Automation, Robotics and Vision(ICARCV), 2020.

A Collision-Free Path Planning Algorithm for Unmanned Aerial Vehicle Delivery
Z. Shi, W. K. Ng. In Proceedings of International Conference On Unmanned Aircraft Systems(ICUAS), 2018.

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| AWARDS AND SCHOLARSHIPS | Nanyang Award | Sep 2018 |
| | Nanyang Technological University, Singapore | |
| | <ul style="list-style-type: none"> • Highest distinction in NTU in recognition of the NTU HPC team. | |
| | First Runner-up, ISC'18 Student Cluster Competition | Jun 2018 |
| | HPC-AI Advisory Council, Frankfurt, Germany | |
| | <ul style="list-style-type: none"> • Led Team NTU as captain in this undergraduate HPC competition. | |
| | Championship, SC'17 Student Cluster Competition | Nov 2017 |
| | Association for Computing Machinery (ACM), Denver, United States | |
| | <ul style="list-style-type: none"> • Optimized application <i>MrBayes</i> by vectorization on AVX-512 instructions. • Achieved 4x speedup compared to native version. • Also won Highest LINPACK Award. | |
| | NTU Science and Technology Scholarship | Aug 2014 - May 2019 |
| | Ministry of Education, Singapore | |
| | <ul style="list-style-type: none"> • Full scholarship for undergraduate study in NTU. | |
| TECHNICAL SKILLS | Programming Languages: C++, Python, Java | |
| | Operations Technologies: Docker, Linux container | |
| | Libraries: OpenMP, Boost, TensorFlow, PyTorch, Horovod, MPI, CUDA | |
| | Others: Bash script, Git, L ^A T _E X | |
| LINKS | LinkedIn : https://sg.linkedin.com/in/zijishi | |
| | Website : https://zijishi.xyz | |
| | GitHub : https://github.com/StevenShi-23 | |