

Chenggang ZHAO

PERSONAL DATA

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EDUCATION

SEP 2017 - Current Undergraduate in COMPUTER SCIENCE AND TECHNOLOGY, **Tsinghua University**, China
GPA: 3.75/4.0 (RANKING 19%, 44/222)

SEP 2014 - JUN 2017 High School Student, **Hengshui High School**, China
RANKING 1% in National College Entrance Exam

PUBLICATIONS

OCT 2019 Student Cluster Competition 2018, Team Tsinghua University: Reproducing Performance of Multi-Physics Simulations of the Tsunamigenic 2004 Sumatra Megathrust Earthquake on the Intel Skylake Architecture, *Parallel Computing* 36 (2019)
Jiaao He, Chenggang Zhao, Jiping Yu, Xinjian Yu, Liyan Zheng, Chenyao Lou, Shizhi Tang, Wentao Han, Jidong Zhai

AWARDS

DEC 2018 SC18 Student Cluster Competition **Overall Winner**, Dallas, USA
Reproduced and analyzed the performance of an earthquake simulator SeisSol, the result has been published on Parallel Computing.

APR 2019 ASC19 Student Cluster Competition **Silver Prize**, Dalian, China
Achieved and optimized an PyTorch implement of an ECCV paper Super-Identity Convolutional Neural Network for Face Hallucination.

JUN 2018 ISC-HPCAIAAC Student Cluster Competition **Overall Champion**, Frankfurt, Germany
Optimized the performance of Lattice Quantum Chromodynamics (LQCD) application Grid on clusters with MPI provided within HPC-X toolkit by Mellanox.

APR 2019 ASC18 Student Cluster Competition **Gold Prize**, Nanchang, China
Achieved and designed a 8x optimization for an electron cryo-microscopy (cryo-EM) data analyzing application RELION.

OCT 2018 North China Area in China Parallel Application Challenge on Domestic CPU, **First Prize**, Wuxi, China
Ported and optimized GROMACS(a molecular dynamics package designed for simulations of proteins, lipids and nucleic acids) on Sunway TaihuLight.

AUG 2018 Beijing Area in China Undergraduate Mathematical Contest in Modeling, **First Prize**, Beijing, China
Analyzed and modeled the RGV(Rail Guided Vehicle) control system using reinforcement learning method.

JUL 2018 Hardware Design Contest, Department of Electronic Engineering, **First Prize**, Tsinghua University, Beijing, China

Designed a Bluetooth-controlled vehicle with WiFi Camera and OpenCV face detection.

- FEB 2018 Software Design Contest, Department of Electronic Engineering, **First Prize**, Tsinghua University, Beijing, China
Designed a simple operating system in Assembly and C, 5k LoC.
- DEC 2017 CCF Certified Software Professional Highest Score (**Ranking 1/5947**)
- JUL 2016 National Olympiad in Informatics, **Silver Medal**, Sichuan, China
- MAY 2016 Asia-Pacific Informatics Olympiad, **Silver Medal**, Beijing, China
- MAY 2016 IOI China Team Selection Competition, **Silver Medal**, Beijing, China
- NOV 2015 National Olympiad in Informatics in Provinces, **First Prize**, Hebei, China

SCHOLARSHIPS AND CERTIFICATES

- Nov 2019 Cai Xiong Scholarship for Science and Technology Innovation Excellence Award of Tsinghua University
- OCT 2019 Science and Technology Innovation Excellence Award of Tsinghua University
- OCT 2018 Science and Technology Innovation Excellence Award of Tsinghua University
- OCT 2018 Volunteer Excellence Award of Tsinghua University
- OCT 2019 TOEFL iBT Test[®]: 89

EXPERIENCES

- SEP 2018 - *Current* Member of the Student Union, Department of Computer Science and Technology, Tsinghua University
- JAN 2018 - MAY 2019 Commissary in charge of publicity, Art Troupe of Tsinghua University
- JAN 2018 - *Current* Member of Student Supercomputing Team, Department of Computer Science and Technology, Tsinghua University

NOTICEABLE PROJECTS

- SW-LBM Archived LBM(Lattice Boltzmann Method) on Sunway TaihuLight
- E-Analyzer An emotion text-analyzer with CNN/RNN, final project for *Introduction to AI*
- BoArtist A SPPM realistic image renderer, final project for *Computer Graphics*
- FEATURES A massive multiplayer online web game, 14k LoC, final project for *Software Engineering*

SKILLS

- Familiar with: C, C++, Python
- Know: Java, JavaScript, HTML, LaTeX, Assembly, System Verilog, MATLAB
- Ballroom Dancing: Waltz, Tango, Quick Step, Fox, Rumba, Cha-cha, Jive

The source code of the projects in Awards and Noticeable Projects sections are available on [my GitHub](#).