## Curriculum Vitae

Zhao, Chenggang Tsinghua University Computer Science and Technology

## PERSONAL DATA

PHONE: +86 18810597132

GITHUB: https://github.com/LyricZhao EMAIL: zhaocg17@mails.tsinghua.edu.cn

#### EDUCATION

SEP 2017 - Current Undergraduate in COMPUTER SCIENCE AND TECHNOLOGY, Tsinghua

University, China

GPA: 3.73/4.0 (RANKING 22%, 49/222)

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 Architec-

ture, Parallel Computing 36 (2019)

Jiaao He, Chenggang Zhao, Jiping Yu, Xinjian Yu, Liyan Zheng, Chenyao Lou,

Shizhi Tang, Wentao Han, Jidong Zhai

#### **AWARDS**

Nov 2019	SC19 Student Cluster Competition Overall Winner, Denver, USA
	Reproduced and analyzed the performance of a highly parallel planetary
	interior normal modes computing application.

DEC 2018 SC18 Student Cluster Competition **Overall Winner**, Dallas, USA Reproduced and analyzed the performance of an earthquake simulator Seis-Sol, 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-HPCAIAC 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
Ост 2019	Science and Technology Innovation Excellence Award of Tsinghua University
Ост 2018	Science and Technology Innovation Excellence Award of Tsinghua University
Ост 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

FEATURES	A massive multiplayer online web game, 14k LoC, final project for Soft-
ThinRouter	ware Engineering MIPS32 CPU and router with RIP implemented in HDL for Computer Organizations and Computer Networks

# **SKILLS**

Familar with: C, C++, Python

Know: Java, JavaScript, HTML, LaTeX, Assembly, System Verilog, MATLAB