

"Life blooms like a flower."

Education

Tsinghua University

BACHELOR • MATHEMATICS AND PHYSICS + CIVIL ENGINEERING AND SYSTEMS

- GPA: 3.91/4.00, Rank: 8/60
- Comprehensive Excellence Scholarship

Beijing, China

2020.09 – 2024.07

High School Affiliated to Nanjing Normal University

HIGH SCHOOL

- **Silver Metal** in the Final of Chinese Physics Olympiad (CPhO 2019)
- **First Prize** in National Olympiad in Informatics in Provinces (NOIP 2018)

Jiangsu, China

2017.09 – 2020.07

Honors

- 2022.12 **Comprehensive Excellence Scholarship,**
- 2022.12 **Volunteering and Public Welfare Excellence Scholarship,**
- 2022.06 **Five-Star Volunteer of Tsinghua University,**
- 2021.12 **Academic Excellence Award,**

Academic

Physics-Based 3D Face Modeling

School of Software, Tsinghua University

2023.04 – Present

ADVISOR: FENG XU

Traditional LBS methods achieve 3D face reconstruction by controlling the shape of the surface mesh, which is achieved by the position and weight of bone joints. However, this method often produces results that do not correspond to anatomy or kinematics when dealing with complex bone and facial shapes. Therefore, this project aims to use physical methods to simulate the physical behaviors of bones and muscles, predict the surface of the face, and better reconstruct 3D faces.

Native Library Fuzzing for Mobile Devices

Department of Computer Science and Technology, Tsinghua University

2022.06 – 2023.02

ADVISOR: JIAJU BAI

In order to improve performance, high-level mobile applications call low-level native code libraries primarily written in C/C++ (in the form of .so library). When the native code library has defects, it affects many mobile applications and poses security risks. This project aims to design and develop innovative testing methods based on the existing work to automatically generate high-level application code fragments and effectively test existing mobile native code libraries using techniques such as fault injection and concurrency analysis.

High Performance Computing and Artificial Intelligence

Department of Computer Science and Technology, Tsinghua University

2021.03 – 2022.03

ADVISOR: JIDONG ZHAI

No contribution was made, mainly focused on learning.

Jiaao He et al. "FasterMoE: modeling and optimizing training of large-scale dynamic pre-trained models". In: *Proceedings of the 27th ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming*. PPoPP '22. New York, NY, USA: Association for Computing Machinery, Mar. 2022, pp. 120–134. ISBN: 978-1-4503-9204-4. DOI: [10.1145/3503221.3508418](https://doi.org/10.1145/3503221.3508418). URL: <https://dl.acm.org/doi/10.1145/3503221.3508418>

Competition

- 2021.02 **Honorable Mention**, Interdisciplinary Contest In Modeling

GitHub

Some small projects made for fun!

blog Personal Blog

housing-price-model A small research paper for the expansion of Engineering Economy course

ilatex Simple L^AT_EX Templates

taichi-extras Simple Utils & Patches for Taichi

thu-learn-downloader Download everything from Web Learning of Tsinghua University

THU-VI Remote Sensing Monitoring and Analysis of Campus Greening at Tsinghua University

tiny-mesh-viewer A Tiny Mesh Viewer based on OpenGL

TinyAlphaZero A Tiny AlphaZero Implementation

WFIUH Curve fitting with function IUH (WFIUH) in Hydrology

Social Work

Technical Service Department of Student Science and Technology Association of Department of Civil Engineering and Construction Management

MINISTER

2022.01 – 2023.01

- Outstanding backbone of the Science and Technology Association
- Participated in the organization of the Structural Design Competition

Learning Department of Weiyang College Student Union (planning)

DEPUTY MINISTER

2021.09 – 2023.01

- Responsible for organizing the Weiyang College Drop-in Tutoring
- Established and managed the Weiyang College information sharing cloud drive

Weiyang-Shuimu 02

STUDY COMMISSAR

2021.09 – 2022.09

Technical Service Department of Student Science and Technology Association of Department of Civil Engineering and Construction Management

ATTENDANT

2021.02 – 2022.01

- Participated in the organization of Maoyisheng Public Welfare Bridge Competition
- Responsible for Science and Technology Association website maintenance

Volunteering

2023.04 364.0 h, “Drop-in Tutoring” Volunteering Activity
2023.03 12.0 h, Volunteer for Structural Design Competition
2022.09 36.0 h, Drop-in Tutoring of Weiyang College
2021.12 4.0 h, Teen Labor
2021.05 6.0 h, Voluntary Anti-Epidemic Service in the Teaching Building
2021.01 16.0 h, Fall 2020 Breakfast Plan

Social Practice

2021.07 **Third Prize**, Following the Previous Route on the Lake — Joining the Shanghai-Jiaxing Summer Volunteer Team of Weiyang Shuimu *Team member*
2021.01 **Excellent Prize**, Caring for Our Alma Mater in 2020 — Joining the Tongzhou Senior High School Volunteer Team *Team member*

Fun Facts

- I use “liblaf” as my username or nickname in many places. It comes from the phrase “Life blooms like a flower”. The initials of each word combined form “lblaf”. For ease of pronunciation, the word “Life” is shortened to its first two letters and the “l” is replaced with “li”, resulting in “liblaf”.
- Do you know why I always wear a hood? It’s because I was once hit on the head by a caterpillar that fell from a tree!