



Zihan Liu

TEL / +86 155-5565-5545

EMAIL / zihanliu@sjtu.edu.cn

Major / Civil Engineering

English / CET4 : 567

CET6 : 500

2015 – 2019



China University of Geosciences

Bachelor

Ranked 355th in U.S. News Global Universities Rankings

GPA: 3.83 / 5.0

Rank: Top 5%

2019 – Now



Shanghai Jiao Tong University

Master of Philosophy

Civil & Structural ranked 29th in QS World University Rankings

GPA: 3.67 / 4.0

Expected Graduation Date: Jan. 2022

Research Experience

Publications

1. **Liu, Z.**, Jiang, N., Zhou, C., Ji, L., Luo, X. "Damage Effect of Terrorist Attack Explosion-induced Shock Wave in a Double-deck Island Platform Metro Station", *Periodica Polytechnica Civil Engineering*, 2021, 65(1): 215-228
<https://doi.org/10.3311/PPci.16929> (SCI Indexed Journal)
2. **Liu, Z.**, Jiang, N., Sun, J., Xia, Y., Lyu, G. Influence of tunnel blasting construction on adjacent highway tunnel: A case study in Wuhan, China. *International Journal of Protective Structures*. 2020, 11(3): 283-303.
<https://doi.org/10.1177/2041419619888936> (ESCI Indexed Journal)
3. Jiang, N., Zhu, B., Luo, X., Zhou, C., Sun, J., Wu, T., Xia, Y., **Liu, Z.**, Tang, Q. Experimental system for simulating the influence of tunnel blasting and excavation on existing lining [P]. CN209764622U, 2019-12-10.

Research projects involved

1. Team leader, National College Student Innovation Training Program, *Numerical Simulation Research on Destruction Characteristics of Terrorist Attacks in Subway Stations* (Grant No. 201710491045)
2. Team leader, National College Student Innovation Training Program, *Dynamic response characteristics of existing tunnels under adjacent blasting* (Grant No. 20181049173)
3. CO-PI, National Natural Science Foundation of China (Grant No. 11772190)
4. CO-PI, National Science and Technology Major Project, *an Experimental Research on Controlling Factors and Diversion of Target Oriented Acid Fracturing* (Grant No. 2016ZX05014-005-012)

Techniques and Skills

1. **Fortran & C Programming Language** Code for multistep iterative numerical simulation and 2D/3D FEM problems
2. **MATLAB** A good master of MATLAB, especially in data visualization process and multiple means of numerical simulation. Certain skills in data analysis as well
3. **ANSYS/Ls-Dyna** Well qualified, be capable of modeling and solving static and dynamic problems in civil engineering
4. **Mathematical Modeling** Have abilities of abstraction and innovation. Led a contest team during 2017 - 2018, which was awarded prizes in several national class and world class competitions
5. **AutoCAD** Plot construction sketches for concrete and steel structures
6. **SPSS** Multivariate nonlinear regression analysis for mathematical modeling
7. **Mathematics, Origin, Tecplot, Photoshop, Office** and other common software

Previous Honors

- | | |
|-----------|--|
| Nov. 2017 | First prize of Hubei Province in the National College Students Mathematical Contest in Modeling |
| Mar. 2018 | Honorable Mention in American Mathematical Contest in Modeling (MCM) |
| Jul. 2017 | Second Prize of Physics Competition of China University of Geosciences |
| Nov. 2017 | Third Prize of the 19 th Science and Technology Paper Conference of China University of Geosciences |

Jun. 2017	<i>Outstanding Graduate</i> of China University of Geosciences
Jun.2016	<i>Excellent Intern</i> in Qinhuangdao Practice Base of China University of Geosciences
Oct. 2016	The National Encouragement Scholarship / University-level outstanding students
Oct. 2017	The Dean Scholarship of China University of Geosciences / University-level outstanding student cadres
Oct. 2018	The Academician Scholarship of China University of Geosciences / University-level outstanding students

● Certificates

Second-level Certificate for National Computer (C language programming) in China

Third-level Certificate for National Computer (Network technology) in China

Fourth-level Certificate for National Computer (Network engineer) in China