

ZHUOHAO ZHANG

Honors Class of Computer Science
Chu Kochen Honors College, Zhejiang University, P.R. China
+86 18867547345 | e: saltfishzzh@gmail.com

EDUCATION

Zhejiang University

Hangzhou, China

B.Eng. in Computer Science (with Honors)

Sept 2015 – June 2019

- GPA: 3.87/4.00, major GPA: 3.95/4.00 (rank top 5% of 181 students); admitted on basis of performance on national college admissions exam (top 0.3%)
- Selected for Honors Class of Computer Science in Chu Kochen Honors College (2 of ~100 participants, on basis of outstanding research performance)
- Visiting student at Harvard University, Cornell Tech and UC Davis

PUBLICATIONS

1. Tianxiang Gao, Xi Yang, **Zhuohao Zhang**, Linlin Li, Zhou Zhao. *Relation Extraction for Chinese Medicine Using ResCNN and Attention*. Under review of the 33rd National Conference on Artificial Intelligence (AAAI'19), Student Abstract
2. Lei Shi, Holly M. Lawson, **Zhuohao Zhang**, Shiri Azenkot. *Designing interactive 3D printed models with Teachers of the Visually Impaired*. Under review of the 2019 CHI Conference on Human Factors in Computing Systems (CHI 2019)
3. Lei Shi, **Zhuohao Zhang**, Shiri Azenkot. *A Demo of Talkit++: Interacting with 3D Printed Models Using iOS Devices*. In Proceedings of the 20th International ACM SIGACCESS Conference on Computers and Accessibility (ASSETS '18). ACM, Galway, Ireland. (to appear)

RESEARCH EXPERIENCE & PROJECTS

Zhejiang University (CAD&CG State Key Lab)

Hangzhou, China

Research Assistant to Prof. Yingcai WU, Director of Vis Group

Apr. 2017 – Present

AR Collaborative Visual Analytics System

- Registered as Provincial Undergraduate Training Program for Innovation and Entrepreneurship
- Acted as the leader of provincial innovation project
- Applied the Augmented Reality-based technology to enable collaborative visualization
- Built a prototype and passed the final defense

Cornell University (Jacobs Technion-Cornell Institute, Cornell Tech)

New York City, USA

Research Assistant and Remote Co-researcher to Prof. Shiri Azenkot

Oct. 2017 – Present

Design Interactions for 3D Printed Models for Blind People

- Remote collaborator for 10 months and student internship for 3 months in the lab
- Responsible for system implementing and paper writing.
- Published a demo paper in **ASSETS'18** and submitted a full paper to **ACM CHI'19**
- Used vision based methods to design interactive 3D tactile models to enable people with visual impairments to access information equally. Designed workshops for teachers of the visually impaired

University of California, Davis (VIDI Lab, Dept. of Computer Science)

Davis, USA

Research Assistant to Prof. Kwan-liu MA, Director of UC Davis Center for Visualization

Jul. 2018 – Oct. 2018

Interactive AR Visualization System Between Large Display Walls and Mobile Devices

- Summer Internship for designing new interactions between large display walls and mobile devices
- Acted as the project leader and worked with several PhD candidates. Will submit a full paper to **PacificVis'19**
- Used computer vision based methods to build new interactions of big screen so that users can free their hands off the keyboard and the mouse
- Implemented AR-based methods to enable more possibilities of exploring the whole visualized system

Hong Kong University of Science and Technology (Dept. of Computer Science Engineering)

Remote

Remote Collaborator with PhD candidates under the instruction of Prof. Huamin QU

May 2018 – Present

Design Interactive System Between Smart Watch and Smartphone

- Remotely worked together to design AR-based interactions of daily wearable devices.
- Used smart watch as a controller to enable eyes-free interactions on the smartphones

California Institute of Technology, Hacktech 2018

Pasadena, USA

Project Leader

Mar. 2018

A Smart Menu that Enables Foreign Visitors to Access Eating Information Equally

- Hackathon project designed in continuous 36 hours
- Offered to attend Microsoft Imagine Cup 2018, US National Finals
- Developed a usable system using multiple products from Amazon, Apple, Google, etc.

Zhejiang University (Dept. of Computer Science)

Hangzhou, China

Co-researcher to Prof. Qingsong SHI, Director of Architecture Lab

Sept. 2016 – Jun. 2018

CPU and Operating System Design From Scratch on Hardware

- Responsible for CPU design and hardware system design and optimization with fellow students through 5 courses of 20 credits
- Designed Single-Cycle, Multi-Cycle, and Pipeline CPU, helped design a System-on-Chips
- Contributed to an operation system and some basic applications built from scratch on hardware

WORK EXPERIENCE**Zhejiang University, Dept. of Computer Science and Technology**

Hangzhou, China

Teaching Assistant, for the course *Introduction to Computer Systems*

Jul. 2017

- TA to Visiting Professor Yale Patt from UT-Austin, member of National Academy of Engineering, University Distinguished Teaching Professor
- Assisted teaching a summer course for ~200 freshmen from Zhejiang University and other fellow universities
- Report to the professor and responsible for reinforcing lessons by reviewing every class, grading tests and homework, and giving instructions on experiments, all based on English

Zhejiang University, Dept. of Computer Science and Technology

Hangzhou, China

Teaching Assistant, for several computer science courses on hardware

Sept. 2017 – Jun. 2018

- TA to Prof. Qingsong SHI, for the course Digital Logic Design and Computer Organization
- Assisted project assignments teaching

Alibaba Group, Chengying Data Analysis Group

Remote

Data Visualization Analyst

Aug. 2018 – Oct. 2018

- Remote co-researcher to design new interactions and visualization of big screen displays
- Design an interactive system of large display walls enabling multiple users analyzing data
- Evaluate new methods without using additional coordinate equipment like previous related work

SELECTED AWARDS AND HONORS

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| • First-class Scholarship for Academic Excellence (top3% in ~850 students) | 2016 |
| • The Outstanding Student Title (top3% in ~850 students) | 2016 |
| • Zhejiang Provincial Government Scholarship (top3%) | 2016 |
| • Second Prize, Provincial Career Planning Competition (No.2) | 2016 |
| • First-class Scholarship, awarded for excellent performance in basic subjects (top5%) | 2017&2018 |
| • Third-class Scholarship for Academic Excellence | 2017 |
| • Microsoft Imagine Cup 2018, United States National Finals Attendee | 2018 |

ADDITIONAL INFORMATION**Additional Professional and Extracurricular Experiences**

- Member of Student Association Union of Zhejiang University, Human Resources Dept.
- Operating Officer of Microsoft Student Club
- Manager of Technique Support Dept. in ZJU Yunfeng Career Planning Base
- Big Data Visualization Summit Forum 2017 in East China, Attendee

Interests

- Graphic Design of publicity, 2 years of experience with dozens of publicity
- Chinese Calligraphy, 12 years, 1st Prize of 1st National Calligraphy Competition among all students

Computer and Language Skills

- iOS, AR related frameworks, C/C++, Java, Python, JavaScript, HTML, CSS, D3.js, MS Office, SQL, VHDL
- AI-related algorithms (Machine Learning, Deep Learning) and optimization algorithms
- English Skill of TOEFL 107 (Speaking 26/30, Writing 30/30)