# 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**

- Tianxiang Gao, Xi Yang, Zhuohao Zhang, Linlin Li, Zhou Zhao. Relation Extraction for Chinese Medicine Using ResCNN and Attention. <u>Under review</u> of the 33<sup>rd</sup> 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*. <u>Under review</u> 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 - Dec. 2018

### **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)

HK, China

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

May 2018 – Feb. 2019

## **Design Interactive System Between Smart Watch and Smartphone**

- Remotely worked together to design AR-based interactions of daily wearable devices.
- Responsible for researching and paper writing.
- Will submit a full paper to **MobileHCI'19**
- Used smart watch as a controller to enable eyes-free interactions on the smartphones

## California Institute of Technology, Hacktech 2018

Project Leader

Pasadena, USA 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

## SELECTED AWARDS AND HONORS

•	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)