

# ZHUOHAO ZHANG

Honors Class of Computer Science

Chu Kochen Honors College, Zhejiang University, P.R. China

+86 18867547345 | e: [zhuohaozhang@zju.edu.cn](mailto:zhuohaozhang@zju.edu.cn) | website: <http://www.zhuohaozhang.com>

## EDUCATION

### Zhejiang University

Hangzhou, China

B.Eng. in Computer Science and Technology (with Honors)

Sept. 2015 – Jun. 2019

- GPA: 3.88/4.00, major GPA: 3.93/4.00 (ranked **top 5%** of 181 students)
- Selected to Chu Kochen Honors College (2 of ~100 participants, on basis of research performance)
- 3 Successive Years of **First-Class Scholarship**
- UC Davis, Research Assistant; Cornell Tech, Visiting Scholar

## PUBLICATIONS

1. **Zhuohao Zhang**, Xiyuan He\*, Kai Zhang. *GPK: An Efficient Special Symbol Input Method for Keyboards Using Glide*. In Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems (CHI 2019), Extended Abstract
2. Lei Shi, Holly M. Lawson, **Zhuohao Zhang**, Shiri Azenkot. *Designing interactive 3D printed models with Teachers of the Visually Impaired*. In Proceedings 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)

\* indicates equal contribution as first author.

## RESEARCH EXPERIENCE & PROJECTS

### Cornell University (Enhancing Ability Lab, Cornell Tech)

New York City, USA

Research Assistant to Prof. Shiri Azenkot

Oct. 2017 – Dec. 2018

#### Design Interactions for 3D Printed Models for Blind People

- Implemented the mobile system and participated in qualitative data analysis and paper writing
- Published a paper in **ASSETS'18** and **CHI'19**
- Used vision-based methods to design interactive 3D tactile models to enable people with visual impairments to access information equally
- Designed several workshops for teachers of the visually impaired

### Zhejiang University (CAD&CG State Key Lab)

Hangzhou, China

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

Apr. 2017 – Apr. 2018

#### Augmented Reality-based Collaborative Visual Analytics System

- Registered as Provincial Undergraduate Training Program for Innovation and Entrepreneurship
- Acted as the leader of provincial innovation project
- Applied the AR-based technology to enable collaborative visualization on a City-Scale of thousands of buildings
- Built a prototype and passed the final defense

### 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

- Joined as summer internship. Implemented the system and participated in user study and paper writing
- Will submit a full paper to **VIS'2019**
- 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

### 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
- Invited 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)**

Research Assistant to Prof. Qingsong Shi, Director of Architecture Lab

Hangzhou, China

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 operating system and some basic applications built from scratch on hardware

**TALK****Tactile Graphics in Education and Career Symposium**

Baltimore, USA

Presenter at National Federation of the Blind, Jernigan Institute

11<sup>th</sup> Oct. 2018 – 12<sup>th</sup> Oct. 2018

- Presented with Ph.D. candidate Lei Shi from Cornell University
- Title: Sensables: 3D Printed Models for Visually Impaired Students

**TECHNICAL REPORT**

1. Zhaoyuan Su, **Zhuohao Zhang**, Fan Lin, Zhou Yu. *WeCare: An Intelligent Tool Enhancing Storytelling Experience to Support Retired Elder's Mental Wellness*. Technical Report.
2. Tianxiang Gao, Xi Yang, **Zhuohao Zhang**, Linlin Li, Zhou Zhao. *Relation Extraction for Chinese Medicine Using ResCNN and Attention*. Technical Report, Hangzhou, China. Deployed as part of the knowledge base system at Alibaba Inc.

**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
- Reported to the professor and was responsible for reinforcing lessons by reviewing every class, grading tests and homework, and giving instructions on experiments, all in 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 in the teaching of project assignments

**SELECTED AWARDS AND HONORS**

- First-class Scholarship for Academic Excellence (top 3% in ~850 students) 2016
- The Outstanding Student Title (top 3% in ~850 students) 2016
- Zhejiang Provincial Government Scholarship 2016
- Second Prize, Provincial Career Planning Competition (No.2) 2016
- First-class Scholarship, awarded for excellent performance in basic subjects (top 5%) 2017&2018
- Second and Third-class Scholarship for Academic Excellence 2017&2018
- Microsoft Imagine Cup 2018, United States National Finals Attendee 2018

**ADDITIONAL INFORMATION****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**

- 2 years of experience in designing public posters and advertisement banners
- 12 years of experience in Chinese Calligraphy, won 1<sup>st</sup> Prize of 1<sup>st</sup> National Calligraphy Competition

**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
- TOEFL 107 (Speaking 26/30, Writing 30/30) IELTS 8.0 (Writing 8.0/9)