# **ZHUOHAO ZHANG**

Honors Class of Computer Science Chu Kochen Honors College, Zhejiang University, P.R. China

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#### **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 (INCLUDING UNDER-REVIEW)

- 1. **Zhuohao Zhang**, Xiyuan He\*. *GPK: An Efficient Special Symbol Input Method for Keyboards Using Glide*. <u>Submitted</u> to the 2019 CHI Conference on Human Factors in Computing Systems (CHI 2019), Student Research Competition, Extended Abstract
- 2. Zhaoyuan Su, **Zhuohao Zhang**, Fan Lin, Zhou Yu. WeCare: An Intelligent Tool Enhancing Storytelling Experience to Support Retired Elder's Mental Wellness. Submitted to the 2019 CHI Conference on Human Factors in Computing Systems (CHI 2019), Student Design Competition, Extended Abstract
- 3. 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)
- 4. 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)
- 5. 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.

### 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

#### 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

## 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 application and participated in qualitative data analysis and paper writing
- Published a paper in ASSETS'18 and submitted a paper to ACM CHI'19, will submit a paper to UIST'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

## 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

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)

Hangzhou, China Sept. 2016 – Jun. 2018

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

## 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

11th Oct. 2018 - 12th Oct. 2018

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

#### 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
•	Third-class Scholarship for Academic Excellence	2017
•	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 1st Prize of 1st 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)