ZHUOHAO ZHANG

Honors Class of Computer Science
Chu Kochen Honors College, Zhejiang University, P.R. China
+86 18867547345 | e: zhuohaozhang@zju.edu.cn | website: http://zhuohaozhang.com

EDUCATION

Zhejiang University   Hangzhou, China
B.Eng. in Computer Science (with Honors)   Sept. 2015 – Jun. 2019

- GPA: 3.87/4.00, major GPA: 3.95/4.00 (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
- Harvard University, Visiting Student; UC Davis, Research Assistant; Cornell Tech, Visiting Scholar

PUBLICATIONS (INCLUDING UNDER-REVIEW WORKS)

1. **Zhuohao Zhang**, Xiyuan He*. *GPK: An Efficient Special Character Input Method for Keyboards Using Glide*. Submitted to 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.* Under review for 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)

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

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) Hangzhou, China
Research Assistant 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

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 (top 3%) 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)