

YIJUN ZHOU

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EDUCATION

Stanford University

Stanford, CA — 09/2016 - 06/2018 (expected)

Master of Arts in Music, Science, and Technology, GPA: 3.94

Beijing University of Posts and Telecommunications

Beijing, China — 09/2012 - 06/2016

Bachelor of Engineering in Computer Science and Technology, GPA: 3.75

AREA INTERESTS

Computer Music, Human-Computer Interaction, User Interface Design, User Experience, Machine Learning

PUBLICATIONS & PAPERS

"Guided Deep Breathing for Automobile Commuters"

IMWUT 2017(Submitted)

Pablo Paredes, **Yijun Zhou**, Nur Al-huda Hamdan, Stephanie Balters, Wendy Ju, James Landay

"Towards Robust Tracking with an Unreliable Motion Sensor Using Machine Learning"

NIME 2017

Jiayue Wu, **Yijun Zhou**, Yun Zhang, Mark Rau, Matt Wright

"Embodied Sonic Meditation: a multimedia framework for audio-visual contemplation"

ICMC 2017

Jiayue Wu, Julius O. Smith, **Yijun Zhou**, Matt Wright

ACADEMIC EXPERIENCE & PROJECTS

Vehicle 3D Interactive Sound System Design and Implementation

05/2017 - Present

- Design and implement a 3D sound system in the car and map the car motions to the sound effects
- Conduct user experience research on the passengers' emotional reaction to the entertainment aspect of the 3D interactive sound system and awareness level of autonomous cars motions

Human Related Haptic Interaction Design and Experiment

11/2016 - 08/2017

- Designed and implemented the haptic and sound system of the deep breath guidance system
- Conducted human related experiments and did research on the effect of deep breath on drivers fatigue and stress in both manual and autonomous conditions
- Compiled and finalized the qualitative and quantitative evaluation of the feedback from participants

Augmented Reality Educational Game Design and Implementation

04/2017 - 07/2017

- Designed the theme, mechanisms, interaction interface of an piano educational game in interactive Augmented Reality
- Implemented the full-stack of the AR game, including mechanism implementation, 3D object detection, hand position detection, gesture detection, networking, and Hololens integrating
- Conducted usability testing, including heuristic evaluation, qualitative surveys and in-person user observations

Machine Learning Solution to Mixed Reality Hardware Unreliability

10/2016 - 04/2017

- Designed customized machine learning algorithms for Leap Motion, to predict the hands trajectories when they are out of the sensing range, and to classify overlapping hand gestures in real time, with minimum errors
- Designed the Mapping of hand motions to continuously real-time vocal processing

Voice-Controlled Virtual Reality Game Design and Implementation

01/2017 - 04/2017

- Designed the interactive interface and the audio part of an voice-controlled FPS game in Virtual Reality
- Implemented the core parts of the VR game, including spoken word detection, volume detection, integrating VR, and audio features
- Conducted usability testing, including heuristic evaluation, qualitative surveys and in-person user observations

Pervasive Interaction Design

09/2016 - 12/2016

- Started from needfinding to low-fidelity, med-fidelity, hi-fidelity, video and final interactive prototypes(mobile Android App) to facilitate more face-to-face interaction among the digitally isolated and encourage teamwork in struggle socially people
- Conducted user experience research using storyboarding, interviews and rapid prototyping to identify and finalize scenarios

Online-Education-System Design and Development

02/2016 - 06/2016

- Designed and implemented the front-end and back-end of the online-education-system with live streaming and video on demand features integrated
- Conducted usability testing and system reliability testing

Brand New Network Architecture Kernel Algorithm Design and Implementation 01/2016 - 04/2016

- Implemented hashing algorithms to improve the inquiry performance of the network architecture by 16%
- Did experiments with different parameters to optimize the efficiency of the algorithm

Global-Scale Internet Drum Circle System Design and Implementation 01/2016 - 04/2016

- Designed the system of an Internet Drum Circle that allowed musicians to participate in collaborative music making on the Internet
- Solved the problem of network delay by sending drum beats in the tight real time music performance
- Coded the Drum Server in Python to achieve the control and coordination among drum players

PROFESSIONAL EXPERIENCE

Palazzo Altemps Museum

Rome, Italy — 03/2017 - Present

Mobile Application Designer & Developer

- Design and develop TourInPalazzo, a multi-platform App that offers a musical and architectural tour of the museum, which is widely used public service, from wireframe to final implementation
- Iterate with researchers, curators and users on the App design and conduct usability testing

Hearst Overseas-Study Affairs Service Agency

Beijing, China — 04/2016 - Present

Cofounder & Counselor

- Establish strategic goals by gathering pertinent business, financial, service, and operations information; identify and evaluate trends and options
- Prepare daily workloads for staff and co-ordinate the daily allocation of work; mentor and train up juniors and new staffs
- Plan and implement a US University learning campaign to ensure the successful business between our customers

Oracle Solution Center

Beijing, China — 09/2015 - 03/2016

User Experience Designer & Developer Intern

- Identified specific solutions to satisfy the requirements of our educational institute partner
- Developed and presented our formulated solutions; developed a multi-tenancy Learning Management System (LMS) on the basis of Canvas, an open source project
- Iterated with our partner with the design of the system and implemented an LMS that is effective and suitable for a Chinese custom environment

ZTE Technology Co., Ltd.

Beijing, China — 07/2015

Student Intern

- Assisted engineers with testing network equipment and recorded results, including: TD-LTE Test, EPON Test, NGN Test, and SDH Test