

# ZHERAN XU

HCI Researcher interested in  
Mixed Reality & Digital Heritage  
Developer | UX Designer

## CONTACT

+86 15221593226  
xuzheran@hotmail.com  
<https://github.com/QuinnXu>

TO LEARN AND CREATE, FOR A MEANINGFUL LIFE AND A BETTER WORLD.

## EDUCATION

### University of Nottingham

Sep. 2017 - Dec. 2018 UK



MSc. Human Computer Interaction  
Dissertation: Interactive information  
visualization of house price with  
regional information.

Supervised by Dr. Ke Zhou

### Tongji University

Sep. 2013 - Jun. 2017 China



BEng. Computer Science  
Final Year Project: Non-cooperate  
Gaming behaviors on social network  
modeling.

Supervised by Prof. Jihong Guan

## LANGUAGE

English (IETLS 7.0), Wu Chinese,  
Mandarin

## SKILLS

### Research Skills

Academic Writing, Survey, Interviews,  
Statistic Analysis, Experimental Research,  
Case Studies, Ethnography, Field Study,  
Usability Testing, Data Analysis with basic  
Machine Learning.

### Coding & Design Skills

C/C++, C#, Python, JavaScript, HTML,  
CSS, SQL, R.

Raspberry Pi, Unity, Processing

Information Visualization, Front-end &  
Back-end development, Data crawling  
and manipulating, GUI Application  
development, Automation.

User-Centered Design process, Rapid  
Prototyping, Storyboard, Design  
Thinking, Interaction Design, User  
evaluations.

## WORK EXPERIENCE

### Siemens Healthineers

R&D Engineer | Mar. 2020 - Present



- Designing and prototyping an eye-tracking equipment for hand-free image processing for surgery on Hackathon.
- Pioneers in Digital Community, held and organized Digital Skills tutorial.
- Using C# for auto test engineering and internal tools development, occasionally conducted Usability testing.

### Tongji-MIT City Science Lab

HCI Researcher | Jul. 2019 - Dec. 2019



同济大学设计创意学院  
College of Design and Innovation  
Tongji University

- Worked at Center of Digital Innovation Lab as research intern.
- Designed and prototyping new version CityScope, which is dedicated to solving spatial design and urban planning challenges by MIT Media Lab
- Conducted user evaluation for HMI of Autonomous Driving.

## PROJECTS

### Contactless Spot Adaptor

- Honorably awarded 1<sup>st</sup> Place at Siemens Healthineers Hackathon 2020
- Implemented Tobii eye-tracking device with ROI based dose image regulation & processing. This solution provides a hand free interaction method for surgeons to operate in an aseptic environment.
- Built upon Unity engine with Tobii SDK, developed in C# for abstaining eye-gaze point and back-end communication, using Python for image processing and real-time visualization.

### Living Memories (Ongoing)

- The ultimate vision is to create an open-source database for public and government to collect data correlated to locations by creating POI at an GIS platform in an crowd-sourcing method. And using digital tech to represent or reconstruct.
- Prototyping interactive storytelling on a website, which is adapted from a themed exhibition Zhoushan Museum.
- Conducting investigation and collecting feedback from potential audience from all range of ages. Results show prefer novel digital content is more attractive than static format or 360VR museum.

### CityScope Tongji

- Conceptualized and designed an upgraded version of tangible & digital platform embedded with augmented reality and multiuser interactions base on CityScope.
- Developed and deployed prototype on a touchscreen desk, a info-viz screen and AR mobile device with synchronization.

09/2013-07/2017 BEng in Information Security

Wish to have one...

**Final year project:** Non-cooperate Gaming behaviors on social network modeling

## Employment

03/2020 - Current **PUBLICATIONS**

- The vision is to create an open government to collect data and an interact GIS platform in

07/2019 - 11/2019 **Research Assistant**

It aims to recall common memory historical heritage site, remain enrich cyberspace to preserve research responsibilities for era, the collection itself is in

04/2019 - 06/2019 **Software Developer**

Representation and storytelling collections. Both Museum and in. By applying social media recreate and find meaning during the interaction with collection.



University of Nottingham

09/2017-09/2018

Master of Science(MSc), **Human Computer Interaction, Merit**

- High Pass (above 70%)

- Core Module: Mixed Reality Technology, Design Ethnography, Human

Study Human Performance, Information Visualisation

- Dissertation: A

- Key values: Comparing and evaluating the performance of GeoInformation encoding by prototyping and usability testing.

## %%% and Skills

- Highly developed knowledge and skills related with computer science.
- Hands on experience in HCI research method (Field study, usability test)
- Sense of User experience and Interaction Design skills(Sketch, Prototyping)
- Professional programming skills with outstanding analytical ability. (Python, C/C++, SQL, JavaScript, HTML, CSS,R, etc.)
- Demonstrated ability to develop goals, objectives and implement strategies through case studies and practicing experience with great abilities of problem solving and team work.

Siemens Healthineer Co.Ltd

09/2017-09/2018

Research Assistant (Intern), Tongji-MIT City Science Lab

- Conceptualising tangible interface embedded with augmented reality and multiuser interactions.

- Sketch AR interaction , multi observer

- Prototyping development on web and

-

final year thesis: Non-cooperate Gaming behaviors on social network modeling