Yichen Wang

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Education

The Australian National University — Canberra, Australia
Master of Computing (Advanced) — *July. 2019 – Current*

The Australian National University GPA: 3.9/4 — Canberra, Australia
Bachelor of Information Technology — *Feb. 2017 – July. 2019*

Experience

Research Assistant in Augmented Urban Web – Sound Sculpture project June. 2019 – Jan. 2020
The Australian National University & Data61, CSIRO — *Canberra, Australia*

- Research and understand the state of art of Augmented Reality(AR) technology
- Conducted field study for urban sculptures in Canberra
- Responsible for the design of Sound Sculpture AR system
- Involved in the development of the project in C # programming language and Unity
- This research is partially supported by the CSIRO's Science and Industry Endowment Fund.

Teaching Assistant — 2018 – 2020
The Australian National University — *Canberra, Australia*

- Advanced Computing Research Methods, 2020; Art and Interaction in New Media, 2019 - 2020; Software Engineering, 2018; Programming as Problem Solving, 2018-2019
- Works include designing and running tutorial content and assignments under my own research context (Human Centered Computing), offering programming knowledge and assistance during the lab, marking exams and assignments

Winter Research Intern in Software Engineering — Nov. 2018 – Feb, 2019
Ecole Polytechnique Montréal — *Montréal, Canada*

- Research and understand the research project context
- Optimised a mesh manipulation tool for a suite of mesh generators in C++ programming language

Distinct Projects

Sonic Sculptural Staircase in Head-Mounted Augmented Reality | *C #, Unity* — Feb 2020 – Present

- Research and understand the state of art in Augmented Reality(AR) technology regarding augmentation of sculpture experience/art experiences
- Conducted a pre-design interview study with sculptors regarding the design of *Sonic Sculptural Staircase*
- Designed and Developed the full-stack *Sonic Sculptural Staircase* work using C# and Unity
- Conducted the user study for *Sonic Sculptural Staircase*
- The first half of the work is to be appeared at NIME2021 (The International Conference on New Interfaces for Musical Expression), Shanghai, China

Sonic Sculpture: Activating Engagement with Head-Mounted Augmented Reality June. 2019 – Jan. 2020

- Details referred to experience in Augmented Urban Web
- Published at NIME2020, Birmingham, United Kingdom

Publications

Wang, Y., Gardner, H., Adcock, M.& Martin, C. P., (2021). Sonic Sculptural Staircase in Head Mounted Augmented Reality System (to be appeared at NIME2021 Work-in-Progess Showcase) Martin, C. P., Liu, Z., Wang, Y., He, W., & Gardner, H. (2020). Sonic Sculpture: Activating Engagement with Head-Mounted Augmented Reality. arXiv preprint arXiv:2012.02311.

Technical Skills

Languages: Java, Python, C#/C++, SQLå, JavaScript, HTML/CSS, Latex
Frameworks: JUnit, WordPress
Developer Tools: Git, VS Code, Visual Studio, PyCharm, IntelliJ, Android Studio
Libraries: pandas, NumPy, Matplotlib,etc