Tianyuan Zou

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Tsinghua University

EDUCATION

BE, Computer Science and Technology, **Tsinghua University**   09/2018 – 07/2022 (Expected)
GPA: 3.91/4.0 (top 10%, top 20)

PUBLICATION

- Zihan Wu, Chun Yu, Xuhai Xu, Tong Wei, **Tianyuan Zou**, Ruolin Wang, Yuanchun Shi.(2021) LightWrite: teach Handwriting to The Visually Impaired with A Smartphone. *ACM Conference on Human Factors in Computing Systems (CHI'21).* **Currently Under Review**

RESEARCH EXPERIENCE AND INTERNSHIP

Research Assistant, Group of Pervasive Human Computer Interaction, Tsinghua University   12/2019 – present
(2 separate research experience in the same lab)

- The first team focused on designing new gestures to interact with smart devices.
- Designed and implemented deep learning models to distinguish different gestures.

- The second team designed a Android app which can be used on smartphones to teach the visually impaired the handwriting of English lowercase letters and Arabian digits.
- Designed and implemented studies to gather robust user data from common usage in four selected scenarios of different kinds
- The related paper of the second research has been **submitted to CHI2021**.
- Further studies is on going, looking forward to introduce the app LightWrite to the market this spring.

SELECTED COURSE PROJECTS

Software Engineering   11/2020
Intelligence Question Answering System – Using model applied on GPU to answer various kinds of daily questions(Team project)
- Designed and Implemented User Interface with Vue independently.
- Best UI(front-end) and back-end implementation among 6 groups doing the same project.

Human Computer Interaction Theory and Technology   12/2020
Home Automation device selection with Sight Glance based on VR(Team project)
- Implement Bayes model based on self-collected data to improve the efficiency of selecting devices using sight.
- Designed user study to prove the effectiveness of our model.

Java Program Design and Training   8/2020
Android App Development – Displaying Covid-19 related news and statistics(Team project)
- Designed and Implemented User Interface with Android Studio(Java) independently.
- One of the best projects among hundreds of apps developed by peers.

Fundamentals of Computer Graphics   4/2020
- Independently implied Photon Mapping to render realistic 3D pictures.

Digital Image Processing   4/2020
- Independently implemented Face Morphing with python.

SELECTED EXTRACURRICULAR ACTIVITIES

Leader of Tsinghua University Rhythmic Gymnastics Team(an athletic sports for general amateur students) 01/2021 - present
Assistant Leader of Tsinghua University Rhythmic Gymnastics Team   01/2020-01/2021
Key member of Tsinghua University Distance Running Team(for general amateur students) 09/2018 - present
Director and choreographer of dance drama *One Day*   12/2018

TECHNICAL STRENGTHS

Programming languages: C/C++, Java, Python, JavaScript, Verilog, VHDL, Assembly Language, C#.
Frameworks and tools: Android, Pytorch, Vue, Qt, Django, TensorFlow, Unity, Latex
Languages: native in Chinese; fluent in English (TOEFL 115(Speaking 29))