Xiaohang Tang

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Education

University of Liverpool, Liverpool, UK 09/2021 – 07/2023 (expected)

B. S. in Computer Science

Xi'an Jiaotong-Liverpool University, Suzhou, Jiangsu 08/2019 – 07/2021

B. S. in Information and Computing Science, GPA: 74.6/100(Y1, Top 10%), 77.78/100(Y2, Top 10%)

Selected Relevant Coursework (Mark)

Algorithmic Foundations and Problem Solving (90%, Top 2/513), Artificial Intelligence (86%), Linear Algebra (96%), Multivariable Calculus (82%), Calculus (87%), Intro to Database (81%), Data Structure (80%)

Research Experience

NLP@Liv 10/2021 – Present

Natural Language Processing | Research Assistant | University of Liverpool

Advisor: Prof. Danushka Bollegala | Department of Computer Science

- Researched a novel dynamic wordembedding method. Programmed codes of the experiment and fine-tuned the model.

X-CHI Lab 10/2020 – 08/2021

HCI, VR, Cybersickness | Research Assistant | Xi'an Jiaotong-Liverpool University

Advisor: Prof. Hai-Ning Liang & Prof. Diego Monteiro | Department of Computing

- Researched the correlation between cybersickness and trajectory compression rate in Virtual Reality. Contributed to the experiment design, analyzing trajectory and user data. Programmed experiment project in Unity3D and executed the experiment. Trained experiments' data using Feedforward Neural Network. [C.1]
- Researched a technique of using trajectory compression rate to predict changes in cybersickness in virtual reality games. This technique provides an efficient, low-cost, and practical way to detect cybersickness for individual users in some situations. Wrote a patent for it. [PA.1]

HCI, VR, Accessibility, Games| Research Assistant | Xi'an Jiaotong-Liverpool University

Advisor: Prof. Hai-Ning Liang | Department of Computing

- Contributed to developing and evaluating two VR games to facilitate empathy in people with non-myopia for those who suffer from myopia.
- Programmed experiment projects (games) in Unity3D. Contributed to the experiment and game design, analyzing user data, writing a part of the paper. [EA.1]

Online Research Project 06/2021 – 08/2021

Natural Language Processing, QA| Research Assistant

Advisor: Hongyin Luo (PhD Student) | Computer Science & Artificial Intelligence Lab, MIT

- Built a QA model to answer reading comprehension questions about written passages.
- Trained and evaluated the model in SQuAD dataset. Achieved results with EM score of 68.45% and F1 score of 81.35%.

Publications

EA.1 Xiang Li, **Xiaohang Tang**, Xin Tong, Rakesh Patibanda, Florian 'Floyd' Mueller, Hai-Ning Liang, "Myopic Bike and Say Hi: Games for Empathizing with The Myopic," in **CHI PLAY'21** [SGDC Finalist],[PDF]

C.1 Diego Monteiro, Hai-Ning Liang, **Xiaohang Tang**, Pourang Irani, "Using Trajectory Compression Rate to Predict Changes in Cybersickness in Virtual Reality Games," in **ISMAR'21** [PDF]

PA.1 Diego Monteiro, Hai-Ning Liang, **Xiaohang Tang**, "A method, apparatus and storage medium for detecting user's cybersickness level in virtual environment," **[CN113283612A]**,

Skills

Programming Languages: Python, C/C++, C#, Java
Tools and Frameworks: LaTeX, PyTorch, Unity3D