JIAQI WU

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Portfolio: https://kolvacs-w.github.io/WJQ.github.io/

EDUCATION

University of Michigan, Ann Arbor

Ann Arbor, MI, USA

Master of Science in Information, Human Computer Interaction.

September 2022 - May 2024(expected)

Cumulative GPA: 4.0/4.0

Relevant Coursework: Natural Language Processing (A), Information Retrieval (A+), Interaction Design (A)

Fudan University

Shanghai, China

Bachelor of Science, Computer Science and Information Security.

September 2018 - July 2022

Junior Year GPA: 3.63/4.0; Cumulative Major GPA: 3.56/4.0

Relevant Coursework: Algorithm Design and Analysis (A), Introduction to Computer System I/II (A-/A), Software

Security (A)

WORKING PAPER & PUBLICATION

- [Preprint] viz2viz: Prompt-driven stylized visualization generation using a diffusion model *Jiaqi Wu*, John Joon Young Chung, Eytan Adar
- Characterizing and Understanding the Development of Social Computing through DBLP: A Data-Driven Analysis

Jiaqi Wu, Bodian Ye, Qingyuan Gong, Atte Oksanen, Cong Li, Jingjing Qu, Felicia F. Tian, Xiang Li, Yang Chen.

Journal of Social Computing, vol. 3, no. 4, pp. 287-302

SELECTED RESEARCH EXPERIENCE

University of Michigan, Ann Arbor

May 2023–Now

Augmenting Generative Procedural Art with Generative Model

- Designed a way of augmenting generative procedural art by the random distribution of color, geometric information contents from generative
- Built a p5.js library supporting various functions for creating generative procedural arts making use of generative model
- Provided various p5.js art examples demonstrating how to make use of our library

University of Michigan, Ann Arbor

Sept 2022–Oct 2023

Diffusion Model in Data Visualization

- Identified a design space and taxonomy of stylized visualization.
- Designed and implemented viz2viz, a general recipe with specific workflows to support the creation of stylized visualization with pipelines implemented in PyTorch.
- Finished a research paper as first author

Tsinghua University · Fudan University

January 2022–Oct 2022

Social Computing Research Analysis

- Conducted a research bibliometric analysis on the social computing discipline with literature data from DBLP platform
- Designed and implemented systematic workflow for publication data filtering, information extraction and attributes labeling
- Deployed Graph network analysis, information visualization and structural hole theory to draw insights on the development of social computing research

Published a research paper to an IEEE Journal, Journal of Social Computing (JSC) as first author

Hong Kong University of Science and Technology

July 2021–February 2022

[Project Link] Human Computer Interaction Research on Augmented Reality

- Defined a new concept of creative AR prototype of shape-based art effects and devised its working principle
- Implemented systematic classification for AR prototypes and used Reality Composer and Adobe Aero to improvise numerous prototypes for research study
- Conducted a study to evaluate and optimize the design space to obtain a HCI-oriented systematic workflow

SELECTED PROJECT EXPERIENCE

Natural Language Processing: Simple Text Inpainting System

University of Michigan, 2022

Brought about the idea of text inpainting, and design a system for text inpainting task using simple easy sentences and zero shot learning.

Demonstrated our method to get and implement the system with limited time and resource, making use of LLM. Conducted a set of evaluations to test the performance of our system.

Information Retrieval: Small Search Engine on Social Computing Publication. University of Michigan, 2022 Used Pyterrier, learing to rank model to design and implement a search engine for high quality social computing publications

Statistics and Data Analysis: Dating App User Profile Analysis

University of Michigan, 2022

Used R language to conduct a statistical analysis on open source user profile data from Kaggle

Interaction Design: Mobile Application For Fitness Activities

University of Michigan, 2022

(Group Project) Used Figma to design and implemented the prototype of a mobile application for nearby fitness activities

INTERN EXPERIENCE

Research Intern, Tsinghua University · Fudan University

December 2020-June 2022

Big Data and Social System Development

- Used JavaScript, Python, and Node.js to design and utilize multiple functionalities (file downloading, organization management, etc.) of a mobile application for social activity data processing
- Designed the operation framework for the connection and transportation between the front-end and backend system, and optimized the compatibility and data transmission problems to alleviate data overloading, synchronous access, and inefficient compression problems
- Established publicly accessible system with a user-friendly social management and organization tool for social data analytics

SELECTED AWARDS

•	Fudan University Outstanding Student in 2019–2020	Oct. 2020
•	Fudan University Outstanding Undergraduate Student Scholarship	Oct. 2021
•	Fudan University Outstanding Undergraduate Student Scholarship	Oct. 2020
•	Best Project Design Officer of Fudan University Student Union	Dec. 2018

SKILLS AND OTHER

Computing: Python, PyTorch, JavaScript, SQL, Django, Pyterrier, R, C/C++, ARKit, JEB/Jadx

Languages: Chinese (Native), English (fluent; TOEFL iBT: 106 (speaking: 25), GRE: V-159 + Q-169 + AW- 4.0)

Art & Design: Sketching, painting, video editing, storyboarding, photography, Nuke, Final Cut Pro, Premiere