# Manling YANG

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## Research Interests

I have keen interest in data visualization and human-computer interaction, working with researchers from different fields or interacting with users of different backgrounds makes me feel passionate. Specifically, my research interests include:

- Understanding human behavior through different empirical study methods.
- Modeling human interaction with visual representation using computational techniques.
- · Exploring visual design guidelines for improving user engagement and effective information conservation.

#### Education

## Hong Kong University of Science and Technology (Guangzhou)

MPhil student of Computational Media and Arts

Sep. 2023 - Present

Mentors: Prof. Wei Zeng, Prof. Luwen Yu

## **Chongqing University**

B.Eng. in Electronic Information Engineering

Sep. 2019 - Jun. 2023

Mentors: Prof. Jinglan Ou, Prof. Li Liu

## Publications C2Ideas: Supporting Creative Interior Color Design Ideation with Large Language Model C2

Yihan Hou, Manling Yang, Hao Cui, Lei Wang, Jie Xu, and Wei Zeng.

Proceedings of The ACM CHI Conference on Human Factors in Computing Systems (CHI), 2024.

## A Survey of Computer Vision-Based Fall Detection and Technology Perspectives C1

Manling Yang, Xiaohu Li, Jiawei Liu, Shu Wang, and Li Liu.

CCF Conference on Computer Supported Cooperative Work and Social Computing (ChineseCSCW), 2022.

## Research

### **Tufts University**

Advised by Prof. Remco Chang

## **Experience**

Visual Analytics Laboratory

Dec. 2023 - present

- Led an eye-tracking study involving over 60 participants, constructing the corresponding dataset.
- Analyzed and recovered human viewing behaviors on dashboard objects and layout designs.
- Developed a saliency model with innovative structure integrates both elements and layout information.

## Hong Kong University of Science and Technology

Advised by Prof. Wei Zeng

Collaborative Interactive Visualization & Analysis Lab

Sep. 2022 - present

- · Surveyed graphic overlay patterns and the interplay between visuals and text in financial visualizations.
- Contributed to the development of a creative interior color design tool powered by an intentaligned, domain-specific large language model. C2

## **Chongqing University**

Advised by Prof. Li Liu

IOT & Motion Big Data Lab

Apr. 2022 - Jun. 2023

- Participated the research of human fall detection using causal learning from time-series data.
- Conducted a survey on human fall detection based on computer vision techniques. C1

### **Teaching**

### **Teaching Assistant**

Fall 2022

## Experience

School of Microelectronics and Communication Engineering, Chongqing University

Course name: Digital Electronic Technology

**Scholarship** Comprehensive Scholarship (2nd Class), Chongqing University

9/2022

Comprehensive Scholarship (3rd Class), Chongqing University

3/2023

Service Student Volunteer, VINCI 2023

Sep. 2023

**Skills** Programming: Python, MATLAB, Latex.

Software: Figma, Illustrator.

Computing: PyTorch, Tensorflow, Sklearn, Numpy, Pandas, etc.