Chuer, CHEN

E-mail: chuerchen1998@gmail.com | Website: https://chuer-chen.netlify.app

Research Interests

My research focuses on human-computer interaction and data visualization. I am dedicated to leveraging decision-making models, visualization techniques, generative AI to generate design decisions for intelligent visual content generation, while also developing interactive AI systems to enhance user experience and decision-making processes.

Education

Tongji University 08/2023-06/2027(Expected)

- PhD Candidate in Intelligence Science and Technology.
- Advisor: Prof. Nan Cao
- GPA: 4.36/5.0

National University of Singapore 08/2020-07/2021

- MSc in Electrical & Computer Engineering. (*English-taught*)
- GPA: 4.25/5.0 (Distinction)

Experience

- **Research Assistant**

IDVx Lab advised by Prof. Nan Cao, Tongji University 07/2022-03/2023

Project: 1. Conducted a research on music visualization; 2. Developed the front-end of a Ping Pong data report generation platform.

- **Frontend Engineer**

Alibaba Group 07/2021-05/2022

Publications

- **MV-Crafter: An Intelligent System for Music-guided Video Generation**
  Chuer Chen, Shengqi Dang, Yuqi Liu, Nanxuan Zhao, Yang Shi, Nan Cao. (Under review).
  We present an interactive system and a novel generation pipeline capable of producing high-quality music videos with synchronized music-video rhythm and style.

- **MusicJam: Visualizing Music Insights via Generated Narrative Illustrations**
  Chuer Chen, Nan Cao, Jiani Hou, Yi Guo, Yulei Zhang, Yang Shi. (Chinagraph 2024).
  We propose a lyric generation model and develop a music visualization system that is able to generate narrative illustrations to represent insights of the input music.

Awards

- "Beijing Excellent Graduate" title for top 2% students. 05/2020
- First-class scholarship for top 5% students. 03/2017 & 09/2017 & 09/2018
- Second prize in Beijing Digital Integrated Circuit Design Contest. 06/2018
- Honorable Mention in the Interdisciplinary Contest in Modeling (ICM). 04/2018

Skills

- Programming Languages: Python, Javascript
- Artificial Intelligence: Machine Learning (including Reinforcement Learning), Deep Learning (CNN, Transformers), Generative AI (Large Language Models, Text-to-Image Generation)
- Research: Paper Writing, Literature Review, User Study, Data Analysis
- Language: Master's program conducted in English, GRE(330, Nov 2019), TOEFL(101, Feb 2019)