Zhengwentai Sun

+86 17285700640 | zhengwt.sun@connect.polyu.hk WeChat: taited1079 | Personal Website: https://taited.github.io



Education Background

The Hong Kong Polytechnic University - MPhil

2022.01 - 2023.12

- GPA 4.13/4.3
- Research Student Scholarship

University of Electronic Science and Technology of China - B.E. of Automation

2017.09 - 2021.06

- GPA 3.76/4.0
- · Model Student Scholarship

Publications

A 3D Virtual Try-on Method with Global-Local Alignment and Diffusion Model - Second Author

2023.12

- Accepted to ICASSP 2024 (CCF-B).
- · Contribute to the design of a diffusion model aimed at enhancing the quality of marginal regions.

SGDiff: A Style-Guided Diffusion Model for Fashion Synthesis - First Author

2023.05

- Accepted to ACM Multimedia 2023 (CCF-A).
- Proposed a diffusion-based method capable of incorporating text and style conditions together to control
 the synthesized clothing. More details on our project page.

CoDE-GAN: Content Decoupled and Enhanced GAN for Flexible Fashion Editing - First Author

2023.01

- Under review of IEEE TCSVT (Q1)
- Developed a GAN-based image editing network. Improved the synthesized textures with 20% better FID.
 More details are on our project page.

Automatic Segmentation of Organs-at-Risk from Head-and-Neck CT Using Separable Convolutional Neural Network with Hard-Region-Weighted Loss - Third Author

2021.01

- Accepted to Neurocomputing (Q2)
- Contributed to part of the ablation experiments and reviews on uncertainty estimation methods.

Project

ChatGPT-Powered Role-Playing Game: Life-Reload Simulator - First Contributor

2023.09 - 2023.11

Responsible for a ChatGPT-powered role-playing game, Life-Reload Simulator, which received approximately **450 stars** on Github. Detailed project information can be found here: https://github.com/EmbraceAGI/LifeReloaded Key Contributions:

- Led game mechanics and workflow planning based on ChatGPT's features, abstracting game stages for a seamless gaming experience.
- Directed the design and planning of game prompt engineering, ensuring high-quality generation of game stories and processes in alignment with gameplay.
- Independently managed both frontend and backend functionalities of the game, utilizing techniques such as native H5, Redis, and FastAPI to enable asynchronous calls to the OpenAI API.

Internship

Deep Learning-Driven UI Development - Algorithm Intern at Lightspeed Studios, Tencent Ltd. Developed an innovative widget anchor prediction algorithm to streamline UI development.

2021.04 - 2021.09

Key Contributions:

- Engineered a robust UI structural information parser in Unreal Engine.
- Created a unique dataset for widget anchor prediction.
- Independently implemented and iteratively improved a novel deep learning model for this task.

Skills & Others

- Competitions
 - (2022.12) 6th Winner in Jittor Al Competition. The project can be viewed here.
 - (2020.05) Meritorious Award (Top 8%) in the Mathematical Modeling Contest (MCM/ICM)
- Open Source Contributions: Actively contributed to MMagic (6.2k stars) and MMGeneration (1.7k stars)
- Web Development Experience: Proficient in back-end development with hands-on experience in high-profile exhibition projects at Centrestage 2022 and the Hong Kong Museum of Art
- · Programming Language: Python, Matlab, C
- Deep Learning Framework: Proficient in PyTorch. Experience in Tensorflow, PaddlePaddle, Jittor
- Tools: Proficient in Git, Docker, Latex
- Language: TOEFL 103