

title

Invisible Pixel: Short Video Narratives from a Machine Perspective

year

2021

software

webGL, Unity 3D, Deep-Daze

Artwork description (50 words)

Invisible Pixel is a web page based on China's Internet poverty alleviation background, aiming to explore how computer technology will affect social media in the future. The project uses machine learning to transform short video texts into images, creating a machine-perspective data narratives of rural areas.

Artwork description (300 words)

Short video software has become a new agricultural tool for Chinese farmers to alleviate poverty in recent years. The Internet connects the urban and rural public cultural spaces, social media transforms personal expression into public communication, and the public rediscovered individual narratives in remote areas.

With the popularity of short videos, how will technological innovation further affect social media? Can the current short video-based individual narratives be objectified with algorithms? In what form will it be presented? Will it be more attractive? With such thoughts and purposes, we try to simulate the data experience of social media from a machine perspective to respond.

Invisible Pixel is a web page based on China's Internet poverty alleviation background. It selected 60 IDs information from the program *Happy Village Leaders* launched by the short-video platform Kwai, including five content types: specialties, tourism, life, techniques, and charity. We input the video texts of IDs into the Deep-daze model to generate images to build a visual portrait of IDs. The web page has a linear structure divided into three main views: ID map, Pixel tunnel, and Machine view. Viewers can switch between the daily viewing interface and the machine view by clicking and long-pressing the mouse.

At this stage, the machine has been able to develop its own imagination based on the dataset and make an accurate visual description. The resulting images may not meet conventional aesthetic standards, but offer the possibility of an artificial intelligence present in our future daily life.

Artist bio



Juanjuan Long

Associate Professor, School of Design in Jiangnan University

She is mainly engaged in the research of data information visualization, graphic design, and digital media interaction design. Her information design work was published in *Data Flow* by Gestalten Publishing House. Her design and guidance works were shortlisted twice by IEEE PacificVis Visual Data Storytelling, and won Gold Award of China DataViz Competition, Gold Award of China VISAP Art Competition, etc.



Junlin Zhu

Graduate student, School of Design in Jiangnan University

Her main research directions are narrative visualization, information experience design, and interactive art. Her works shortlisted twice by IEEE PacificVis Visual Data Storytelling, and won Gold Award of China VISAP Art Competition, etc.



Yingjing Duan

Graduate student, School of Design in Jiangnan University

Her researches digital media art and artificial intelligence-assisted design. She explores the change of design paradigms in the digital age and the possibility of combining deep learning with Chinese cultural research. She published two original research articles on FRONTIERS IN PSYCHOLOGY, A Novel Paradigm to Design Personalized Derived Images of Art Paintings Using an Intelligent Emotional Analysis Model; and Research on Emotion Analysis of Chinese Literati Painting Images Based on Deep Learning.



Wenxuan Zhao

Graduate student, School of Design in Jiangnan University

Main research direction: game design, new media art. His work has won awards in international competitions such as 2018 IGEM, 2019 Golden Dolphin, 2020 Made With Uinty, etc.