RENZHI YANG

College of Computer Science and Electronic Engineering
Hunan University
Email: renzhiyang1031@gmail.com [Github]

EDUCATION

Hunan University *Sep 2013 - June 2017*
B.S.,Candidate for Bachelor Degree of Digital Media Technology
Courses Taken: Data Structure and Algorithm, Computer Structure and Composition, Operating System, Computer Network, HumanComputer Interaction, Image Processing, Computer Graphics and Design of 3D Graphics, Mobile and Embedded Software Development
Overall GPA: 3.13

RESEARCH EXPERIENCE

Color Theme Based Deep Neural Network July 2017 - Dec 2017
Main Developer

This is a grayscale image colorization method using color theme based on deep Convolutional Neural Network(CNN). Inputting different color theme which is recommended by our algorithm of data-driven gray image color theme enhancement, can output corresponding colorful image through the CNN.

User-guided Colorful Image Colorization Oct 2017 - Present
Lead Developer

It is a deep learning approach for user-guided colorful image colorization. This system directly maps a colorful image, along with local user sparse input to an output colorization with a CNN learned from large-sacle data. My code is continually update on [Code]

Joint Convolutional Neural Pyramid for Depth Map Super-resolution Sep 2017 - Nov 2017
Main Developer

We present a joint convolutional neural pyramid model with large receptive fields for joint depth map super-resolution.Our model consists of three sub-networks, two convolutional neural pyramids concatenated by a normal convolutional neural network. The convolutional neural pyramids extract information from large receptive fields of the depth map and guidance map, while the convolutional neural network effectively transfers useful structures of the guidance image to the depth image.

PROJECT EXPERIENCE

Electric Power Monitoring System in Virtual Environment Sep 2016 - Feb 2017
Main Developer

This system is based on the Unity3D development platform. Utilizing HTC VIVE interactive function, data management and other technologies, this system enables users to real-time monitor various of electric power data in a virtual world. This system is made for State Grid Shandong Electric Power Company.

Virtual Machine Disassembly Feb 2016 - july 2016
Lead Developer

It is a software that users can do machine disassembly training in the virtual environment. Kinect and Leap Motion are userd to get the user's skeletal actions and various type of gestures. This system is made for National University of Defense Technology.

Development of A Plug-in of Making Virtual Characters Dec 2015 - April 2016
Main Developer

Based on Unity5.2, Ive developed three sets of plug-in. (1) Voice generation plug-in: Turning text into audio. (2) Group characters actions control plug-in: Controlling 18 kinds of actions of a group such as gathering, lining up, obstacle avoidance, etc. (3) Skeleton-based action plug-in: Including different characters (elders, kids, men, and women) different actions (walking, running, salute, crouching and so on).

An Interactive Kinect Game Oct 2015 - Jan 2016
Lead Developer

Using kinect to obtain the actions of players, and combined with FSM, steer system, messaging system and other simple AI methods, to make the users join in the game story and interact with NPCs. The Code is available at [Code]

HONORS

Third Prize in the 2nd China College Students Entrepreneurship Competition.(2016.05)

Third Prize in the 1st Hunan Province College Students Entrepreneurship Competition.(2014.05)

Excellent Student Cadre.

The Second Prize Scholarship.