Shuo-Han Yeh

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Education

National Tsing Hua University - M.S. degree of Computer Science 2015-2017

Master Student in Computer Vision Lab.

Supervised by Prof. Shang-Hong Lai.

Master's Thesis: View interpolation for spherical panorama

National Tsing Hua University - B.S. degree of Computer Science 2011-2015 2014

Project: Test scheduling for Core-based SoC. 2nd place in ICCAD contest

Work Experience

Sr. Engineer, HTC Corporation 2023-now **Engineer**, HTC Corporation 2019-2023

Develop VR projects. Create SDK and API in C/C++ for departments.

Develop unity projects.

Engineer, Gorilla Technology 2018-2019

Develop functions of mask and human detection.

Programming skills

C++ \ C \ C# \ Python \ Matlab

Projects

HTC Corporation

Self-tracking tracker system

Trackers can capture human motion when we bind trackers on the joints. I complete tracker system including tracker runtime(driver) and tracker server in C++. Tracker server gets user's joints position and rotation data from tracker driver and gives instructions(e.g. power on/off) to the driver. Tracker server also communicates with the unity client app and pass user's data for the client.

The eye tracker needs to be calibrated so that the user can clearly see VR views in the headset since everyone's focal length are different. I complete the eye calibration app by unity for users to calibrate.

Add VIVE Cosmos headset to Monado

Monado is the first OpenXR runtime for Linux. Headsets from lots of companies can run on this platform. I add VIVE Cosmos headset to Monado.

Develop the driver using Windows Driver Kit

Modify an existing driver in WDK. Expand functions on the driver including IO control and addition/removal of the driver.

SRWorks AlScene plugin

SRWorks are the project including VR features (e.g. depth estimation, 3D reconstruction, and so on). We have a segmentation feature by segmenting human from the image frame. I add the segmentation feature to SRWorks in C++ and create unity plugin so that the user can see human in the VR virtual scene.

Projects

HTC Corporation

Vive Business Streaming Client unity version

Streaming VR content from a PC to a headset. After headset connecting to a PC by USB or wifi, VBS client app can pass head, controller pose data to PC server. Then PC server will stream frame to the headset.

Gorilla Technology

Mask ` human detection

Use DL model to find out the person who wears a mask.
Use DL model to locate all instances of human beings present in an image.

My Github:

• Web crawler Self-study on web crawler in python.