CFM AI&VR Weekly Report: Week #17 of 2019

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1 Summary

This week I took a deep insight into Intel RealSense platform and Nvidia Jetson platform, and tried to figure out the possibility of deploying deep learning algorithm on them.

2 Intel Realsense D400-Series Depth Camera

The Intel Realsense Depth Camera D400-series uses stereo vision to calculate depth. It's easy to get RGB image with depth using the camera. Intel developers provide a very convient Python binding of the API. Resources: https://github.com/IntelRealSense/librealsense/tree/master/wrappers/python.

2.1 Application

Self-Driving Bot, Hand Gesture Recognition, Edge-Based Intelligence

3 Nvidia Jetson Series Platform

Nvidia Jetson Series Platform integrates hundreds of CUDA units on embedded system, so that we can build AI algorithms at the edge. Nvidia Jetson series platform can provide one-sixth of the performance of Nvidia GTX 1080Ti. Nvidia prepares lots of tutorials and SDK to help developers use the platform.

3.1 Application

Edge-Based Intelligence, AIoT



Figure 1: Different type of Jetson series product.

4 Plan

• Start developing on Intel Realsense and Nvidia Jetson platforms if possible.