

a) Evaluation System based on Multi-agent ROS. The AirSim Simulator runs at a server, providing input images for two agents. The Computation of each agent runs on a ZCU102 board with INCAME. The communication is based on ROS.

b) The maps (left) are generated by the Superpoint feature-points. The tow input pictures is the same scene (right) with the chairs in the whtie boxes. The PR representation of these two pictures are similar.

c) After the same scene detected, the relative pose of the two agents are evaluated with the similar scene. The map is merged with the relative pose.