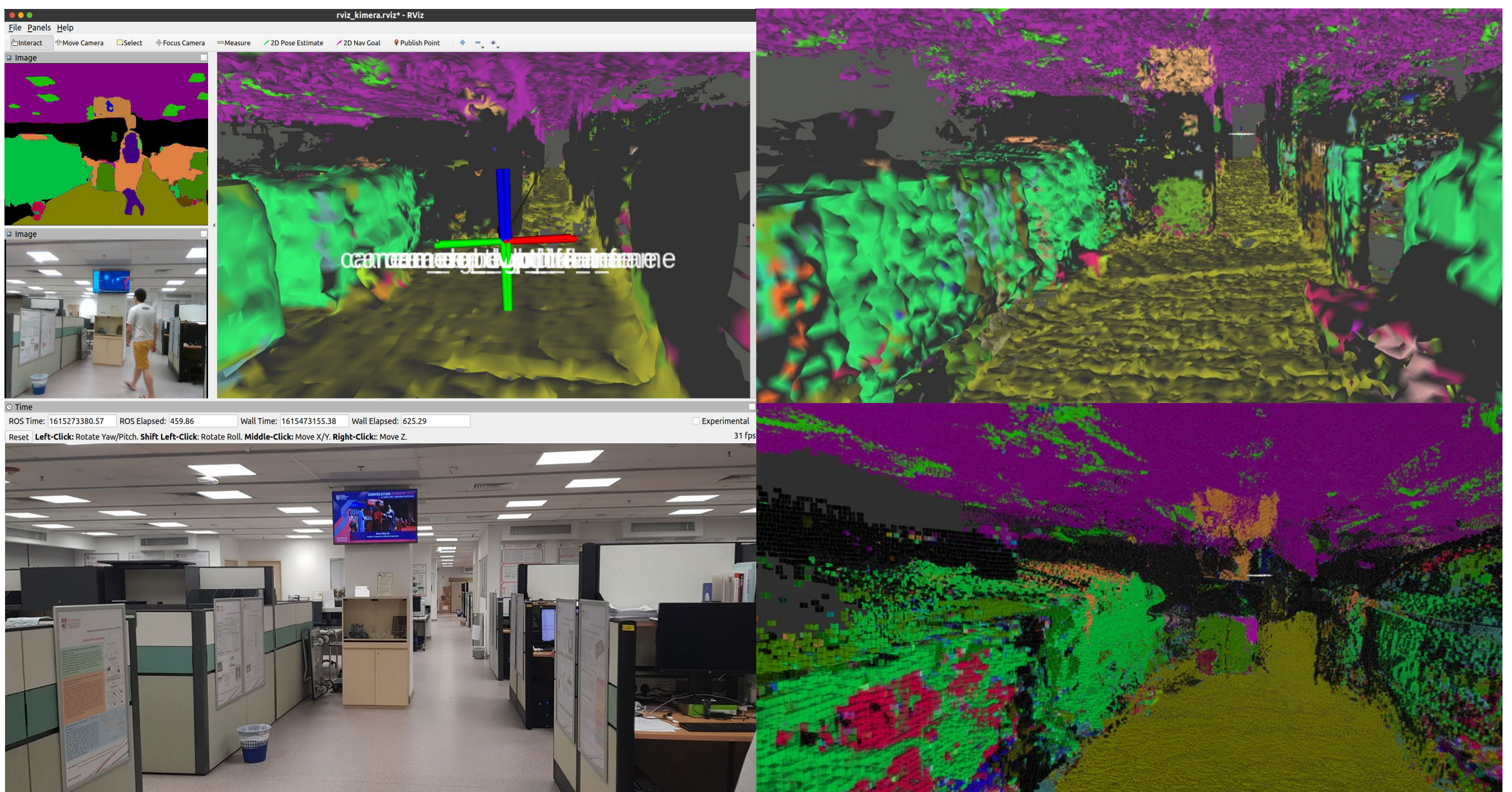


Real-time Visual Localization System on an Embedded Platform

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Project Objectives:

The main goal of the project is to design and implement a real-time *Visual Simultaneous Localization and Mapping (vSLAM)* system on a *Jetson Xavier NX* embedded platform with an *Intel Realsense D435 RGB-D* camera.

The proposed system introduces semantic segmentation to remove dynamic objects from the tracking process of a state-of-the-art *vSLAM* algorithm, thereby enhancing its robustness in pose estimation.

The semantic information is then used to build 3D semantic maps. The potential applications include a wide variety of indoor positioning tasks.

