Rapid Autonomous Semantic Mapping

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Anup Parikh[1], Mark W. Koch[1],
Timothy J. Blada[1] and Stephen P. Buerger[1]
[1]Sandia National Laboratories, United States

- A framework and series of algorithms are developed to autonomously generate 3D semantic maps by:

  - Fusing RGB-D imagery, object segmentation and image detectors

  - Rapidly choosing new sensor views to complete the map and reduce semantic uncertainty

- The approach is demonstrated in a complex and cluttered environment.
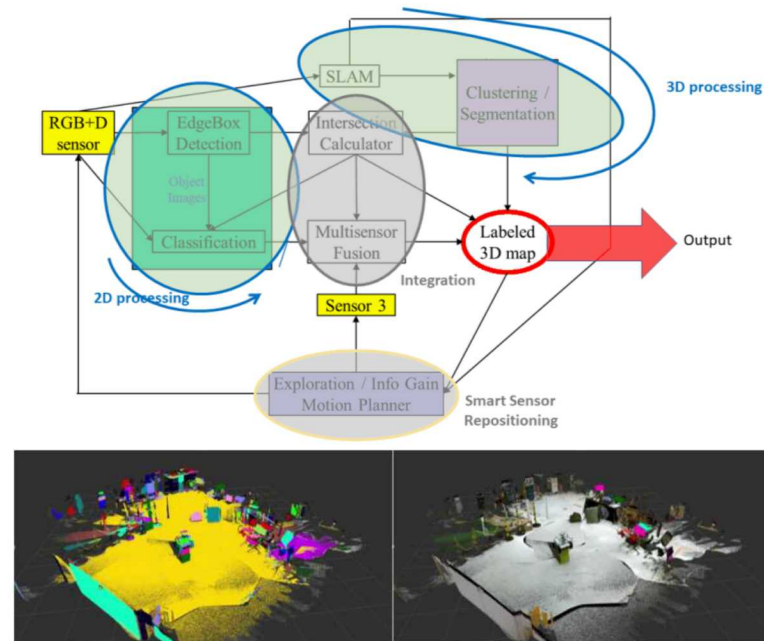
Algorithm block diagram and example system output