

Beyond Simulation: A Framework For SLAM

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BAE SYSTEMS: System Engineering for Autonomous Systems Defence Technology Centre

Aim

The aim of this project is to develop a modular framework for SLAM, which allows the analysis of algorithm advancements for different hardware configurations, in authentic environments, using a suit of performance metrics. The project will involve working in a group.

Description

Some well known problems of the SLAM are the computational complexity and the linearization of a non-linear function in EKF filters, to solve both problems and build a large map a sub-mapping process is necessary.

My role in this project is to implement a sub-mapping approach and test it in an AUV with the SLAM modular framework using vision and laser 3D features with different filters.

