

UNDERWATER SONAR IMAGING ALGORITHM

Project Description

Sonar Imaging has been used extensively in medical applications, however, its applications for underwater is limited, due to medium effects and repeatability issues. The purpose of this project is to investigate inverse scattering algorithms applicable to underwater sonar. A set of scattering data from multiple objects will be provided to the student team.

Objectives

The objective of this project is to come up with a model based shape estimation algorithm for an underwater environment. One possible algorithm to investigate is Colton-Kirsch Inverse Scattering algorithm.

Team requirements

One electrical/Biomedical engineer and one software engineer. The team should have knowledge of signal processing and programming skills. The work will be done on MATLAB.

Contract Information

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