EPSRC CDT in Distributed Algorithms

PhD Project: Developing Novel Bayesian Track Before Detect Approaches for Maritime Big Data Challenges

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Project Description

This PhD investigates ways in which novel Bayesian algorithms can be used to improve track before detect (TkBD) for use in maritime radars, by taking the data and extracting from this bathymetric data on waves and other surface clutter as to distinguish low-observable surface objects (e.g. periscopes and USVs) from and within the clutter to be detected and tracked. This project will have a heavy focus on signal processing algorithms and such Bayesian Algorithms as Particle Filters.

The nature of craft and objects on or just below the surface is rapidly changing, and with it the need to be able to detect and track such craft becomes and essential part in monitoring and reacting to potential future threats in the maritime domain.

For more information please go to the <u>EPSRC CDT In Distributed Algorithms</u> website.