RDR Tec is creating radar for tomorrows flight technology.

Automated Ship and Small Craft Classification Tools for ISAR

RDRTec is working closely with SAIC in developing innovative ISAR classification tools. This includes image processing and image selection algorithms. Feature extraction algorithms of individual images include length estimation and determination of whether the image is a profile or plan view. Depending on the view, additional feature such as height, superstructure and upright size/shape/location as well as width and bow and stern shape are estimated. Over multiple frames these feature estimates are accumulated. Estimates of vessels natural roll period and weight as well as the presence and location of rotating antennas are extracted. Ship feature classification will be extended to the include AIS consistency check capabilities. The AIS code obtained is checked against the features that are consistent with the vessel that is assigned the AIS code. In addition, is the position reports consistent with where the vessel would most likely be located (i.e., large vessel in shallow water or away from shipping lanes).