

A New Criterion Using Pose and Shape of Objects for Collision Risk Estimation

Authors : DoHyeung Kim, DaeHee Seo, ByungDoo Kim, ByungGil Lee

Abstract : As many recent researches being implemented in aviation and maritime aspects, strong doubts have been raised concerning the reliability of the estimation of collision risk. It is shown that using position and velocity of objects can lead to imprecise results. In this paper, therefore, a new approach to the estimation of collision risks using pose and shape of objects is proposed. Simulation results are presented validating the accuracy of the new criterion to adapt to collision risk algorithm based on fuzzy logic.

Keywords : collision risk, pose, shape, fuzzy logic

Conference Title : ICECSP 2014 : International Conference on Electronics, Control and Signal Processing

Conference Location : Paris, France

Conference Dates : December 30-31, 2014