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Principles and Techniques for Sensor Data Fusion 1. Introduction The problem of combining observations into a coherent description of the world is basic to percep-

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Sensor and Data Fusion: A Tool for Information Assessment and Decision Making, Second Edition. This book illustrates the benefits of sensor fusion by considering the characteristics of infrared, microwave,

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Low-level data fusion combines several sources of raw data to produce new raw data. The expectation is that fused data is more informative and synthetic than the original inputs. For example, sensor fusion is also known as (multi-sensor) data fusion and is a subset of information fusion. The concept of data fusion has origins in the evolved capacity of humans and animals to incorporate information from multiple senses to improve their ability to survive.

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Data fusion refers to making full use of multiple information sources by combining redundant or complementary information from multiple information sources in space or time according to specific standards to obtain a consistent interpretation or de-

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Principles and Techniques for Sensor Data Fusion

The figure-1 depicts single hop sensor data fusion system. In this system, every sensor transmits data to the data fusion center directly. The figure-2 depicts multi hop sensor data fusion system. It combines information from multiple sensor sources. In this system, multiple sensors data are collected by hub sensor or aggregator which is ...

Advantages of Data Fusion | disadvantages of Data Fusion

Sensor fusion is combining of sensory data or data derived from disparate sources such that the resulting information has less uncertainty than would be possible when these sources were used individually. The term uncertainty reduction in this case can mean more accurate, more complete, or more dependable, or refer to the result of an emerging view, such as stereoscopic vision. The data sources for a fusion process are not specified to originate from identical sensors. One can distinguish direct

Sensor fusion - Wikipedia

The integration of data, recorded from a multiple sensor system, together with knowledge, is known as data fusion. Data fusion first appeared in the literature in the 1960s, as mathematical models for data

DATA FUSION: MODELS AND PROCEDURES

Reference examples provide a starting point for multi-object tracking and sensor fusion development for surveillance and

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