[Keynote Talk]: Evidence Fusion in Decision Making

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Abstract : In the current era of automation and artificial intelligence, different systems have been increasingly keeping on depending on decision-making capabilities of machines. Such systems/applications may range from simple classifiers to sophisticated surveillance systems based on traditional sensors and related equipment which are becoming more common in the internet of things (IoT) paradigm. However, the available data for such problems are usually imprecise and incomplete, which leads to uncertainty in decisions made based on traditional probability-based classifiers. This requires a robust fusion framework to combine the available information sources with some degree of certainty. The theory of evidence can provide with such a method for combining evidence from different (may be unreliable) sources/observers. This talk will address the employment of the Dempster-Shafer Theory of evidence in some practical applications.