

The 9th International Conference on Information
Fusion, 2006

ALEXANDER KARLSSON
University of Skövde
School of Humanities and Informatics

`alexander.karlsson@his.se`

December 8, 2006

1 Introduction

Dasarathy [1] depicts information fusion as:

"Information fusion encompasses the theory, techniques, and tools conceived and employed for exploiting the synergy in the information acquired from multiple sources (sensor, databases, information gathered by human, etc.) such that the resulting decision or action is in some sense better (qualitatively and quantitatively, in terms of accuracy, robustness and etc.) than would be possible, if these sources were used individually without such synergy exploitation."

The information fusion conference is "the" conference within the information fusion community. It covers different types of fusion techniques from low-level, such as sensor fusion, to high-level information fusion. The conference contains special sessions on different topics as well as tutorials. It was held in Florence, Italy, 10-13 July 2006.

2 The conference

The conference had quite many sessions about high-level information fusion, situation management, and belief theory. This is interesting since most of the previous research has been concerned about low-level information fusion such as multi-sensor fusion in target tracking. The large number of sessions about belief theory reflects the importance of uncertainty management in the context of information fusion. Fault diagnosis, image processing, tracking and different types of combination rules are some of the topics which were covered in these sessions. Another special topic was category theory and how this formalism can be applied in high-level information fusion.

I attended a tutorial "*Fusion of quantitative and qualitative information using DS_mT*", which covered the problem of how one can fuse conflicting and uncertain information. The tutorial encompassed the foundation of DS_mT (Dezert-Smarandache theory) and a set of different combination rules.

3 Conclusions

The conference is a good source for information about low-level sensor-data fusion as well as for high-level information fusion and it is also a good place to meet other researchers.

References

- [1] DASARATHY, B. Information fusion - what, where, why, and how ? *Information Fusion 2* (2001), 75-76.