

Decision Support Systems based on multiple sensor fusion

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Objetivos

Data fusion is a technique that combines multiple data sources to make better inferences than could be achieved from a single data source. In fact, data fusion may improve the available knowledge, updates the current information or improves generic knowledge by means of data. In other words, it has the potential to reduce uncertainty by increasing the confidence of the collected data and the inferred decisions as well as enhancing the robustness of the system. In line with this, is timely and promising to study how multiple data fusion may enhance a Decision Support System, namely its decision-making.

Tarefas a Realizar e Cronologia

T1 Introduction to data fusion (2 weeks);

T2 Review the state of the art (8 weeks);

T3 Design and development (12 weeks)

T4 Testing and evaluation (8 weeks)

T5 Write the report (12 weeks)

	Feb	Mar	Apr	May	Jun
T1	X				
T2	X	X			
T3		X	X	X	
T4				X	X
T5			X	X	X

Requisitos Técnicos / Académicos

Hard skills: Proficient in Programming, and Statistics

Soft skills: Enthusiastic, Competitive, Dedicated, Perseverant, Creative, Logical and Critical thinking, Desire to learn.

Resultados Esperados

- Source code and documentation of all code development;
- Journal or conference paper describing the process (tentative)
- Project report.

Referências Bibliográficas

[1] **Medical Decision-making Inspired from Aerospace Multisensor Data Fusion Concepts**, Pombo N., Bousson K., Araújo P., Viana J., in *Informatics for Health & Social Care*, 2014:185-197.