



# Specific action: contribution to CCV Ontology

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# Objectives

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- Extend CCV Ontology with aspects related to:
  - Imprecise knowledge representation
  - Tools and methods for dealing with imprecise spatial information
  - Non-probabilistic methods for fusion
- In cognitive vision
- Text as a ps or pdf file + web pages in CCV Ontology

# Contents

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- Reasoning (section 3 of CCV Ontology)
  - Issues:
    - General definitions of information fusion for decision making
    - Fusion in image processing and cognitive vision
  - Methods:
    - Bases of fuzzy sets and possibility theory
    - Fuzzy sets and possibility theory in image processing and vision: tools for spatial reasoning under imprecision
- Status:
  - About 2/3 of the text is written
  - Next month: complete text, translation into web pages



# Possible extensions

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- More on knowledge representation
- Fuzzy and possibilistic fusion
  - Classification of combination operators
  - Choice of an operator
  - Decision making
  - Specificities in cognitive vision
- Belief function theory (Dempster-Shafer / Smets)
- Introducing spatial information in fusion schemes