Information Fusion (IFU), Summer Semester 2023

Information about the Exercises

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Document	The aim of this document is to prepare you for the information fusion exercises. If anything is unclear to you, please do not hesitate to contact us.
Goal and Content	• The content of the exercises will accompany the lectures and will cover (i) the basics of information fusion and (ii) evidence theories, i. e. probability theory, Dempster-Shafer theory, fuzzy set theory and possibility theory. For each of these theories, we will look at some unique characteristics and explore key differences between them. Since each of the evidence theories could be covered in a full course, the exercises aim to provide an intuition of them. • The exercises include tasks such as applying mathematical concepts from the lectures and deriving proofs. You will also often be asked to describe a concept or idea in your own words and give your own examples. We will also work through and discuss recent scientific publications. • The exercises are designed as a discussion between all participants.
Procedure	• The exercise tasks will be uploaded to ILIAS consecutively. • **Please prepare the provided tasks until the given date.** • **Be prepared to present your results, ideas, and thoughts. The exercise is driven by your participation.** If you had any problems in solving or understanding a task, please share this in the discussion so that we can work through the task together. • Some exercises rely on supplementary material such as books or papers. Supplementary material will be handed out together with the exercise task sheets.
Dates	Thursdays, starting **06.04.2023** 9:45 - 10:30