Title: Vague information on finite alphabets and its monotonous characteristics

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Abstract:

The bachelor thesis is focused on information-theoretic source of messages with vague recognition from a final general alphabet. The aim of this work is to compile an overview of existing approaches to entropy and information. There were published several approaches how to convert to the fuzzy set theory the concept of entropy, which was originally introduced in physics, mathematically expressed as an additive-probability model and adjusted for Shannon probabilistic information source. Most of these approaches maintains the additive-probability model, while the emphasis in the theory of fuzzy sets is laid on the characteristics of minimum and maximum.

Keywords:

Entropy, Information, Fuzzy sets, Vague Entropy, Vague Information