There is a lack of a clear definition of Vector Symbolic Architectures (i.e., in terms of axioms and theorems)

We wish for better insights in trade-offs and capabilities

Encoding real world data

 Easier access for non-mathematicians would be nice, as well as a structured way how to solve tasks (e.g. design patterns)

 What has to be manually designed, what can be learned?

• There are plenty of connections to other fields...



High dimensional computing - the upside of the curse of dimensionality

Thank you for your attention

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Neubert, P., Schubert, S., Protzel, P. 2019. An Introduction to Hyperdimensional Computing for Robotics. KI - Künstliche Intelligenz. https://doi.org/10.1007/s13218-019-00623-z

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