Cross-lingual Modeling of Lexical Metaphor and Metonymy in WordNet Using ChainNet

Languages often extend word meanings through **metaphor**—where meanings share some common features—or **metonymy**—where a part represents the whole or vice versa. We have modeled these extensions in ChainNet, which annotates over 50,000 senses from Princeton WordNet 3.0 by linking these senses to reflect metaphorical and metonymic extensions. This talk explores the structural characteristics of these sense extensions within WordNet. For instance, we demonstrate how synonyms can be leveraged to identify the nature of the semantic links. Additionally, by incorporating translations from the Open Multilingual WordNet, we find that metonymic extensions are more consistently shared across languages than metaphoric ones. Finally, we examine how large language models encode metaphors and discuss the potential for modeling novel sense extensions.