

Probabilistic Unranked Predicate Logic

Lali Tibua

Probability theory deals with the challenges posed by uncertainty, while logic is more used for reasoning with perfect knowledge. Probabilistic logic combines capability of probability and logic. It gives expressive and flexible platform to model and reason problems coming from with Artificial Intelligence (AI).

Unranked predicate logic is an variant of predicate logic with function symbols having flexible arity. Such an extension brings flexibility and expressiveness in the language to model and reason with unstructured data. In this talk we propose probabilistic extension of unranked predicate logic. In particular, we discuss syntax, semantic and inference mechanism of the extended formalism – probabilistic unranked logic