Special Issue

Language Acquisition and Understanding

Message from the Guest Editors

The remarkable capabilities of Large Language Models have pushed the boundaries of artificial intelligence, yet they also highlight a fundamental gap between statistical pattern matching and genuine comprehension. This Special Issue seeks to explore the critical relationship between how an AI system learns language (acquisition) and what it truly understands. We invite novel research that moves beyond scaling data and parameters to address the core mechanisms of language understanding. We are particularly interested in work that draws inspiration from human cognition, such as data-efficient learning inspired by child development, grounded acquisition that links language to perception and action, and the emergence of compositional reasoning. Topics of interest include, but are not limited to the following:

- Low-resource and continual language learning;
- Grounded language acquisition in embodied agents;
- Emergent communication and symbolic reasoning;
- The role of interaction and social learning in AI;
- New benchmarks for evaluating deep understanding over surface fluency.

Guest Editors

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