

# Tree-Adjoining Grammar Parsing with Neural Networks

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We present neural network-based Tree-Adjoining Grammar (TAG) parsers that make crucial use of distributed representations. We show that our parsers achieve state-of-the-art performance in English TAG parsing. We also demonstrate that the parsers outperform previous parsers in the downstream tasks of textual entailment and unbounded dependency recovery. Our results provide further support for the claim that TAG is a viable formalism for problems that require rich structural analysis of sentences. Finally, we present our ongoing work on polyglot approaches with contextual word representations where latent representations are shared across languages.