Solving Semantic Analogy Problems Using ConceptNet

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Summary

We implemented a system for solving SAT analogy problems, using ConceptNet. The system attempts to find the relationship between the target pair of words (such as mason:stone) and each option pair (such as teacher:chalk, carpenter:wood, soldier:gun, photograph:camera, book:word), scores the similarity of each option's relationship to the target's relationship, and selects the option with the highest score. On a dataset of 374 questions, it achieves an accuracy rate of 28.6%.

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