Guided Language Generation for Multilingual and Educational Applications

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Abstract

This dissertation investigates how external knowledge, structured representations, and explicit constraints guide generation without updating model weights across three settings. For grammatical transformation in Bribri, dictionary and grammar resources combined with example selection and task decomposition improve performance over shared-task baselines. For dialogue localization, Dialogue Act Script separates communicative intent from surface wording, supporting cultural adaptation and producing dialogues preferred over human and machine translation baselines. For early literacy education, a comparative evaluation measures how well language models generate text under learner-specific decoding constraints. Together, these studies show how application requirements can be made explicit within generation workflows and examine the roles of verification and human judgment in selecting appropriate output.