E2EET: from pipeline to end-to-end entity typing via transformer-based embeddings

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Dr Michael Stewart

Authors: Michael Stewart, Wei Liu
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Relevance to the Centre

T1 are looking at an pipeline based approach to their research. In this paper Michael identifies that existing entity typing models require pre-identified mentions and cannot operate directly on plain text. Pipeline-based approaches are therefore used to join a mention extraction model and an entity typing model to process raw text. Another key limiting factor is that these mention-level ET models are trained on fixed context windows, which makes the entity typing results sensitive to window size selection. In light of these drawbacks, we propose an end-to-end entity typing model (E2EET) using a Bi-GRU to remove the dependency on window size. To demonstrate the effectiveness of our E2EET model, we created a stronger baseline mention-level model by incorporating the latest contextualised transformer-based embeddings (BERT).

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