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**A Data Format Enabling Interoperation of Speech
Recognition, Translation and Information Extraction
Engines: The GALE Type System**

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Live interoperation of several speech- and text-processing engines is key to tasks such as real-time cross-language story segmentation, topic clustering, and captioning of video. One requirement for interoperation is a common data format shared across engines, so that the output of one can be understood as the input of another. The GALE Type System has been created to serve this purpose for interoperating language-identification, speaker-recognition, speech-recognition, named-entity-detection, translation, story-segmentation, topic-clustering, summarization, and headline-generation engines in the context of Unstructured Information Management Architecture. GTS includes types designed to bridge across the domains of these engines, for example, linking the text-only domain of translation to the time-domain types needed for speech processing, and the monolingual domain of information-extraction engines to the cross-language types needed for translation.

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