Incorporating Knowledge Graphs and Large Language Models into Visual Text Analysis Tools



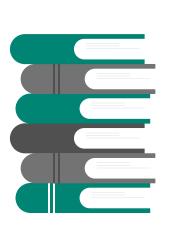
Adam Coscia, Alex Endert



Liz Richerson, Sue Mi K., Stephen S.,

Introduction





- Large language models (**LLMs**) and knowledge graphs (KGs) can help summarize, extract, explain, and validate text in documents!
- How can LLMs & KGs be put in visual text analysis tools? How will they affect sensemaking?

Methods

- We co-designed a prototype visualization tool that lets analysts create document piles and...
- Run **LLM tasks** like summarize, extract, and answer questions directly on documents in piles
- Search/extract **KG facts** + **trace the source**, to find new docs & put them in piles for follow-up analysis
- We ran a study w/ 845 docs, to observe how LLMs and KGs affect sensemaking during analysis

Watch our video!



acoscia6@gatech.edu



https://adamcoscia.com/ papers/vispile



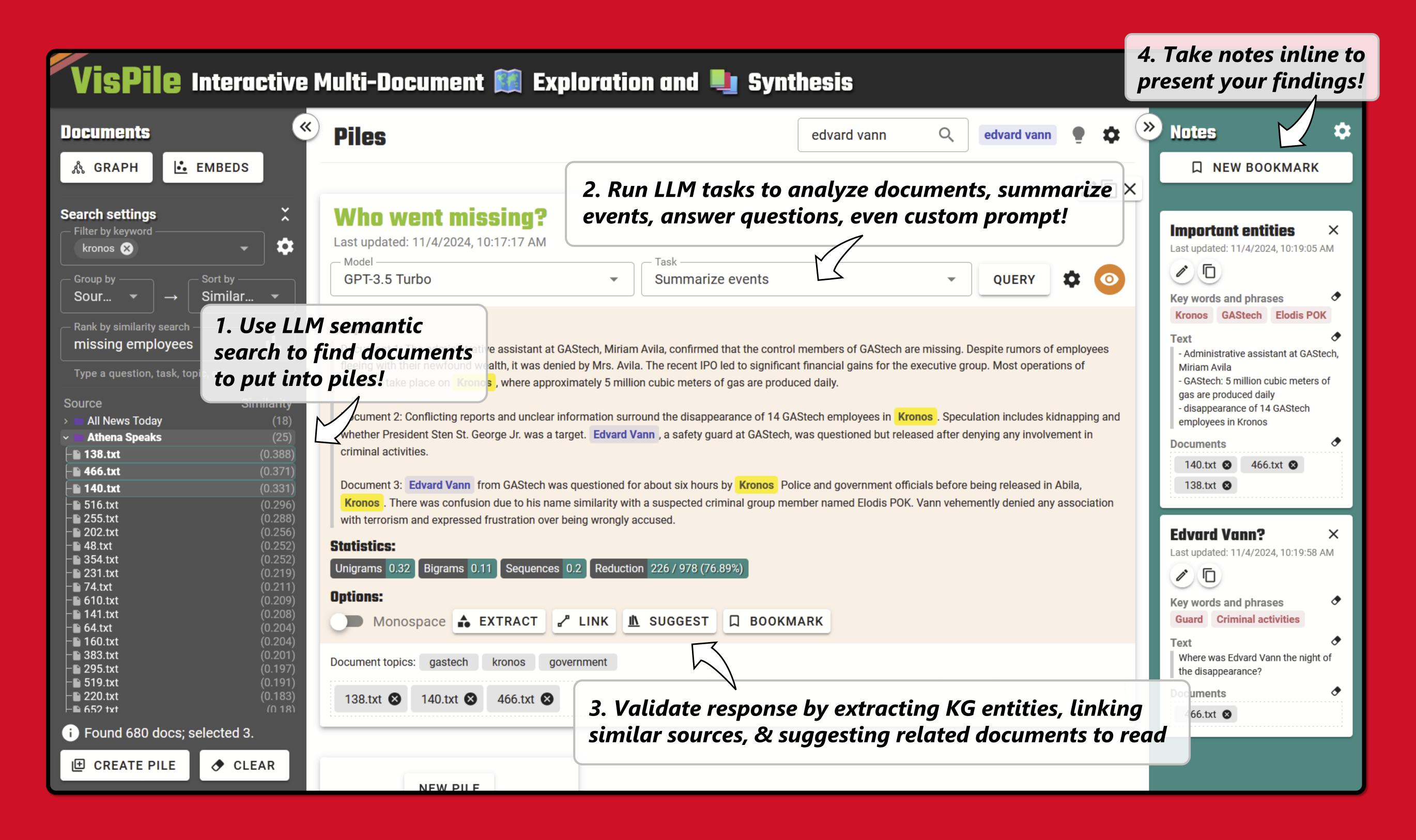


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We built a tool, VisPile, to explore how LLMs & KGs can help analysts find relevant sources, analyze document, & validate LLM responses!



We then ran a study w/ students. VisPile enabled new LLM- & KGassisted workflows, yet raised issues of trust and understanding!

