

Al Trends Analysis



A data science web application

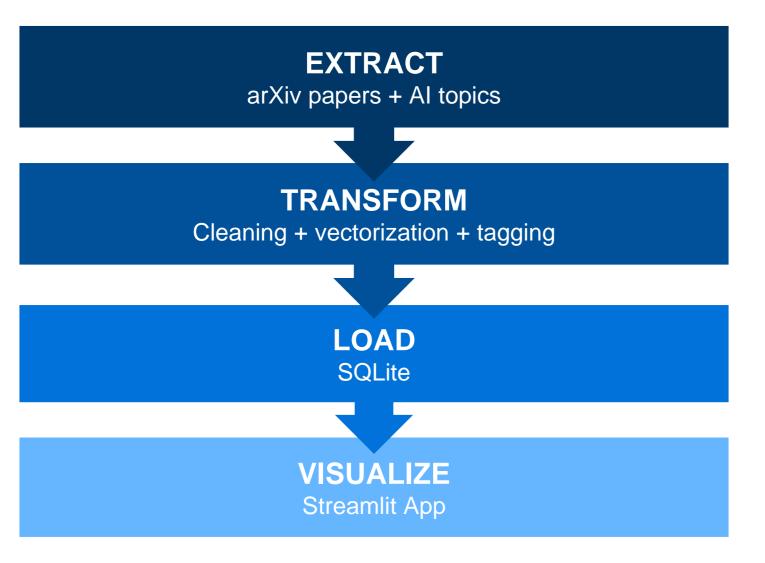
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>>> What - Why - Who

- TabulAI is an interactive web application that dynamically visualizes the evolution of AI trends in the academic domain.
- Providing researchers and professionals with data insights and pattern discovery.
- General public and academics as audience.

>>> How

- ETL pipeline
- Academic papers tagged with AI topics using vector embeddings and similarity search
- Utilizes ML and NLP algorithms
- Interactive and user-friendly visualizations



TECHNOLOGY HIGHLIGHTS

- ★ Vector Embeddings:
 "From words to wisdom."
- ★ Similarity Search:
- ★ ML & NLP: "Finding patterns that matter."

"Connecting dots in a sea of knowledge."

System Architecture AI TOPICS **ARXIV PAPERS** Machine Learning * Pretrained model * HuggingFace & KagiSearch Vectorisation & Evaluation of * Vector embeddings for text Tagging tagging accuracy by calculating KagiSearch utilizing NLP techniques cosine distance NLP classifier * Similarity calculations (cosine distance) Web Application **Database** SQLite / **PostGreSQL** GUI - UX - Frontend Streamlit - Python - Plotly

>>> RESULT - User Interaction

Topic Search | Top Trends | Paper Search | Topic Tree

