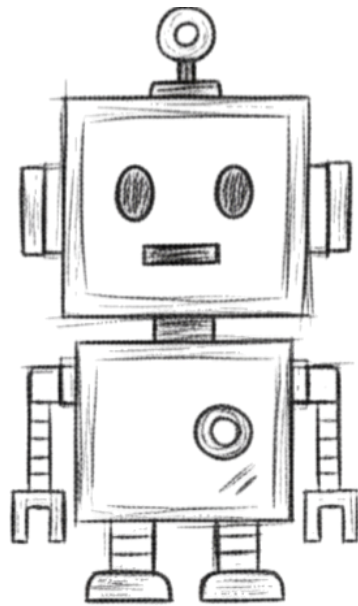


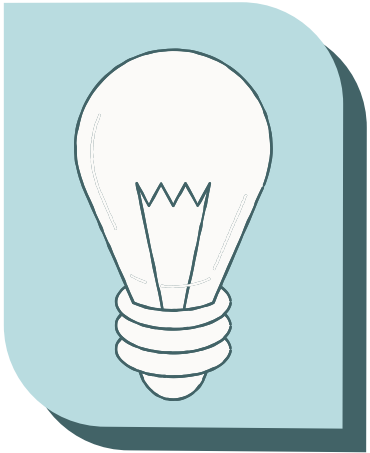
STRUCTURED AI AGENTS

for Reliable Visualization

Report Generation



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HIGHLIGHTS

- **Clean & Correct Data**
By performing **case normalization** and data cleaning, we achieved correct and consistent Top-K extraction.
- **Reliable Metrics**
All quantitative results are deterministically computed, **eliminating AI-induced hallucinations**.

- **Structured Report**
Our report generation pipeline organizes results into **structured sections**, improving readability and consistency.
- **Efficient Generation**
Our pipeline completes within about **15 seconds**, enabling efficient and responsive visualization generation.



METHODOLOGY

1. Structured AI Agent Design

We decompose agent into multiple structured sub-task units:

- **Overview**
- **Temporal Trends**
- **Top Entities**
- **Cross-Metric Relationships**

3. Execution & Report Composition

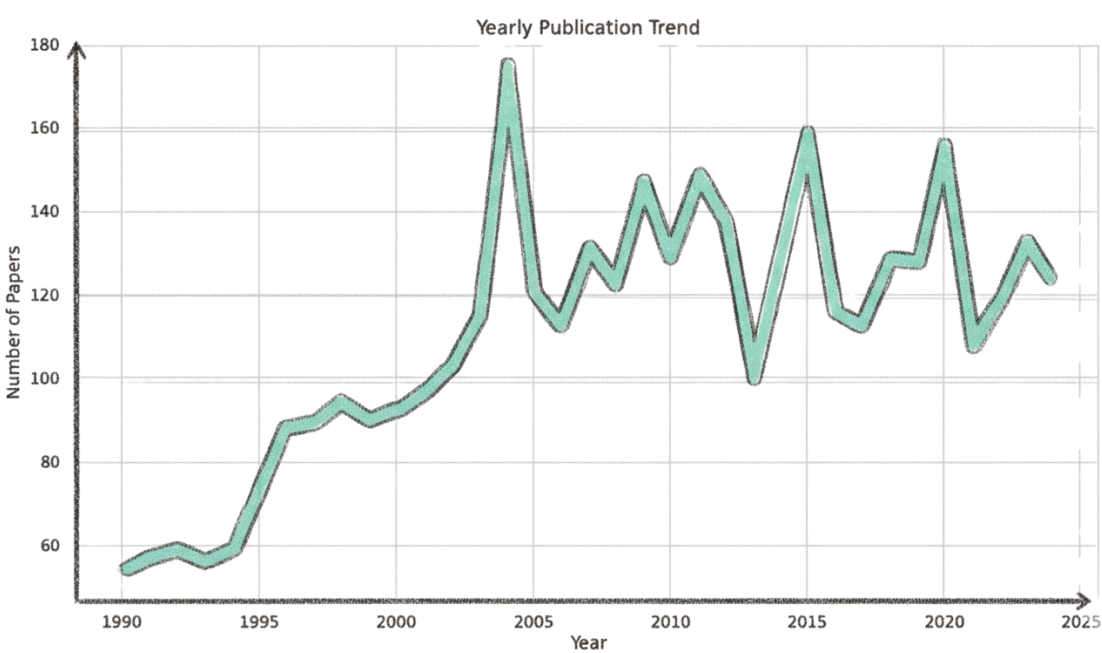
Integrates verified data, charts, and text into a **readable and reliable** visualization report.

2. Structured LLM Output

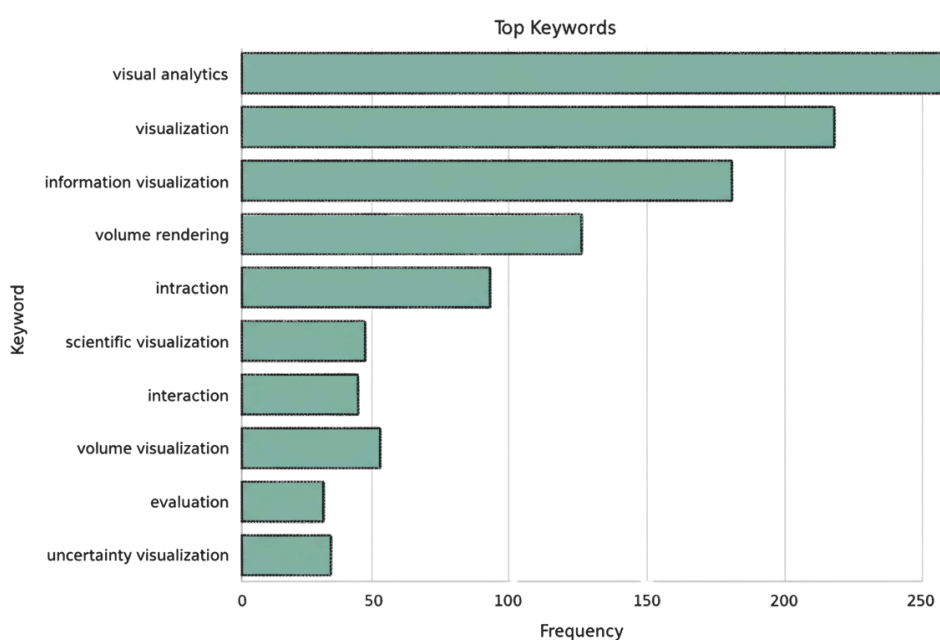
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RESULTS



Yearly Publication Trend:
All numerical values are deterministically computed, eliminating AI-induced errors.



Top Keywords:
Case normalization prevents common counting errors caused by inconsistent capitalization.

