

Structured AI Agent–Generated Visualization Report

This report was automatically generated by an AI agent. All quantitative values in the narrative are computed from code, not inferred.

Overview

Dataset Overview

An overview provides a comprehensive understanding of the dataset's scope, including its temporal and conference coverage. This is crucial for contextualizing subsequent analyses.

The dataset contains 3877 papers from 1990 to 2024, across 4 conferences.

Conference Distribution

Understanding the distribution of papers across conferences helps identify key venues and dissemination channels. This can guide researchers in targeting their submissions.

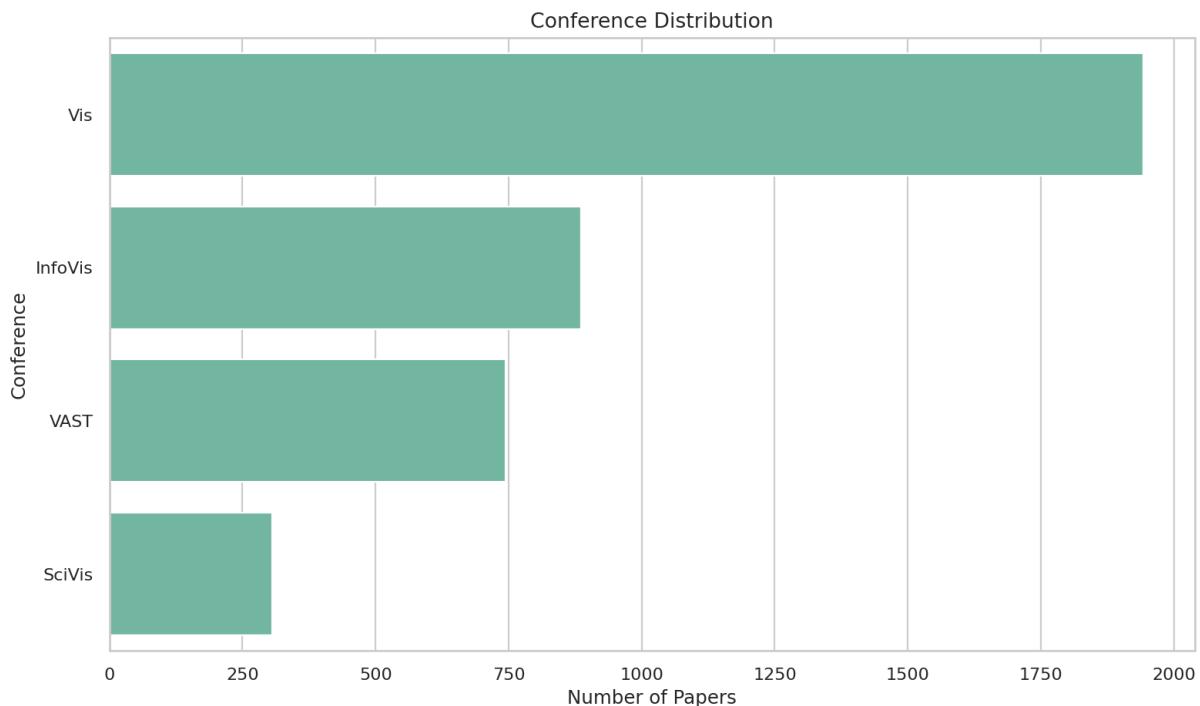


Figure 1. Conference Distribution

Out of 3877 papers, the top conference is Vis with 1942 papers. A total of 4 conferences are represented.

Temporal Trends

Yearly Publication Trend

Analyzing yearly publication trends reveals growth patterns and potential cycles in research output. This can indicate the field's development over time.

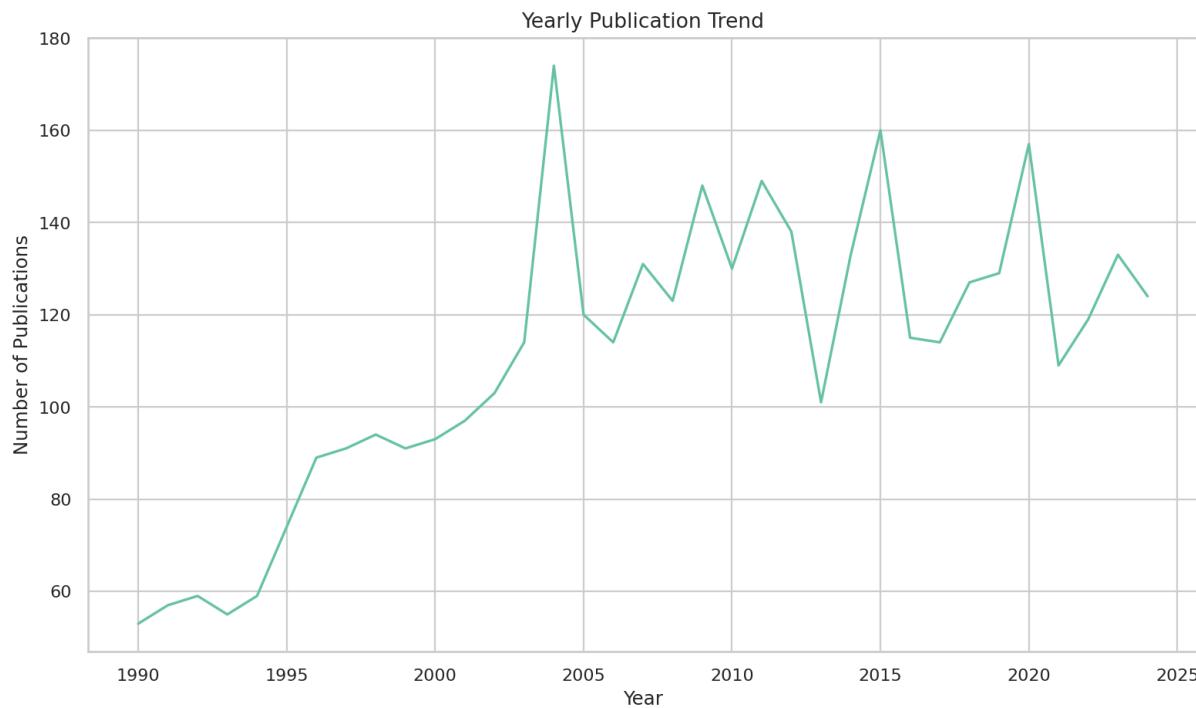


Figure 2. Yearly Publication Trend

From 1990 to 2024, the peak year was 2004 with 174 publications.

Yearly Awarded Papers Trend

Tracking awarded papers over time highlights trends in recognition and excellence within the field. This can reflect the evolving standards of quality.

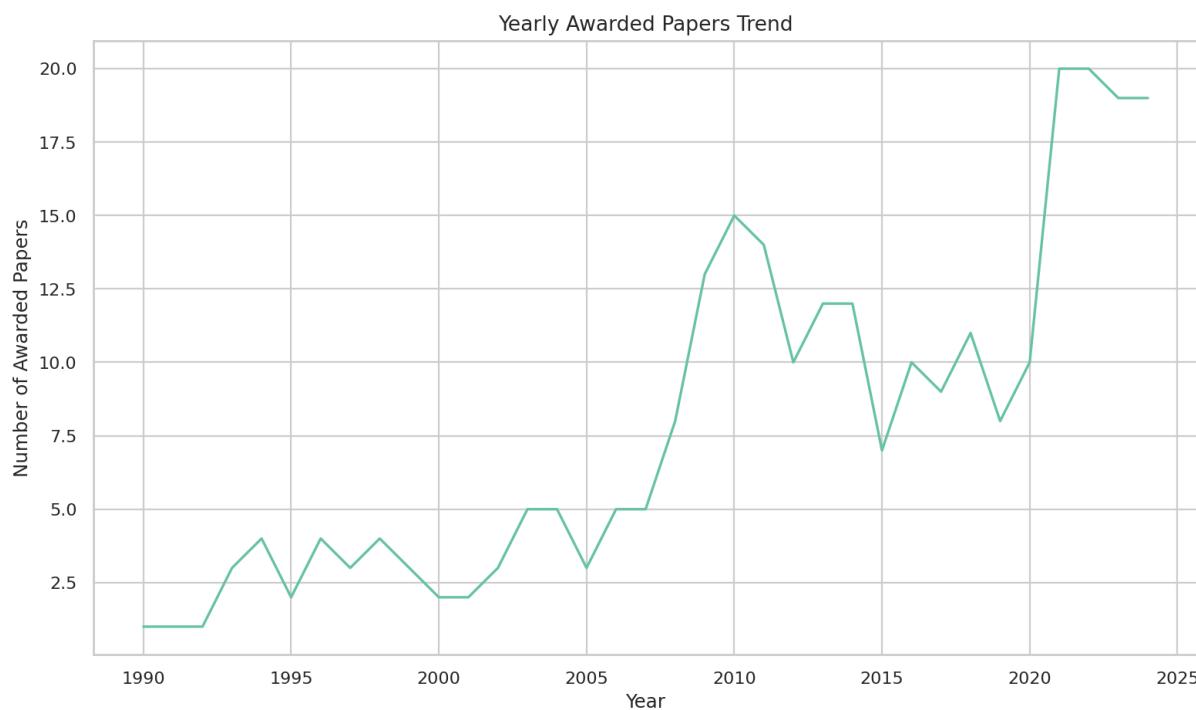


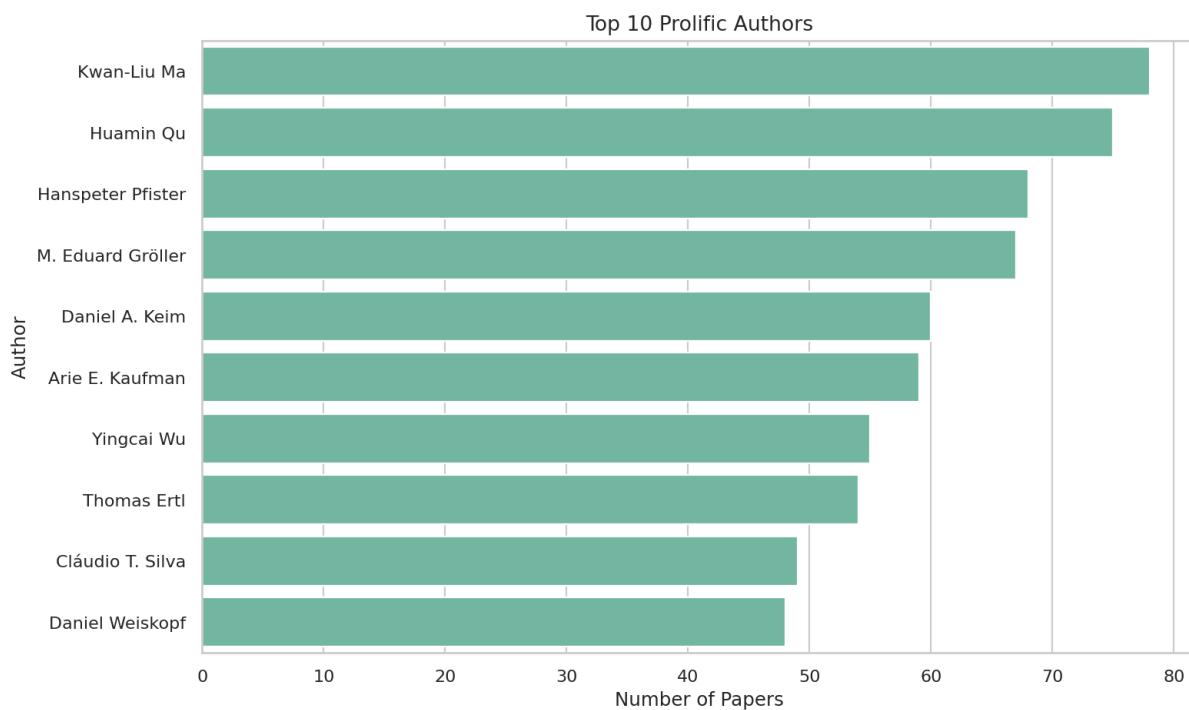
Figure 3. Yearly Awarded Papers Trend

From 1990 to 2024, the peak year for awards was 2021 with 20 awarded papers.

Top Entities

Top 10 Prolific Authors

Identifying prolific authors helps recognize core contributors and potential collaborators in the field. This can foster networking and collaborative opportunities.

*Figure 4. Top 10 Prolific Authors*

The most prolific author is Kwan-Liu Ma with 78 papers.

Top Keywords

Analyzing top keywords reveals dominant themes and vocabulary in the research field. This can guide future research directions and highlight trending topics.

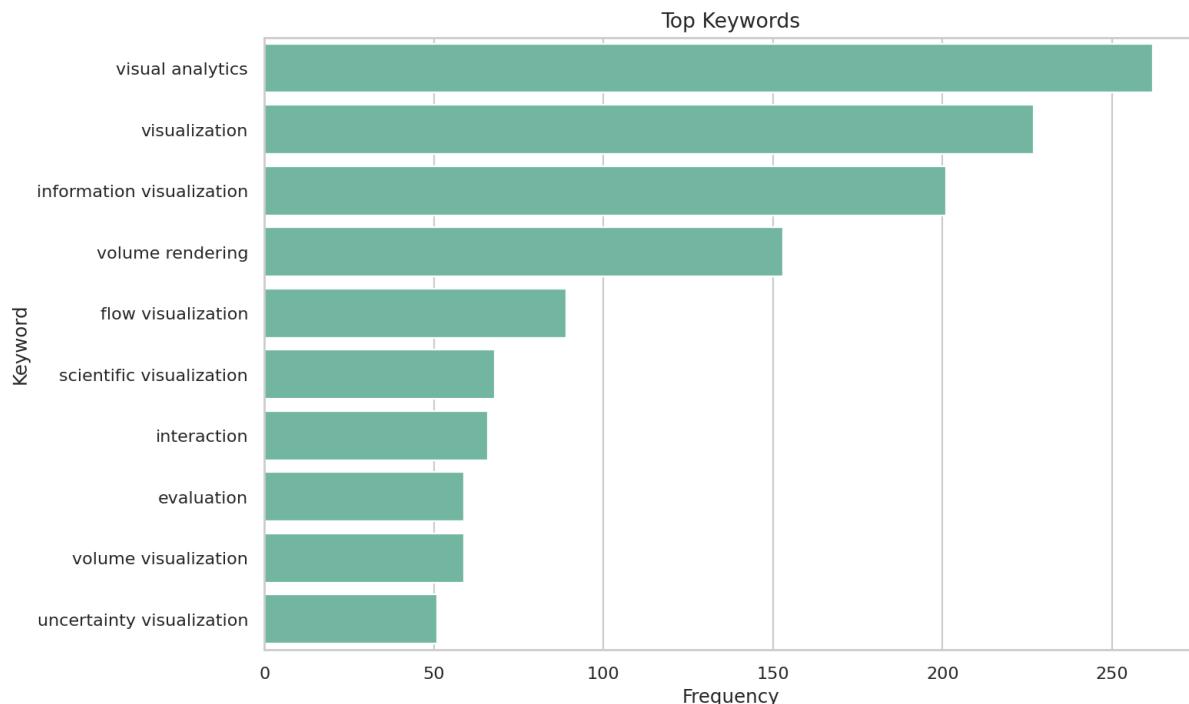


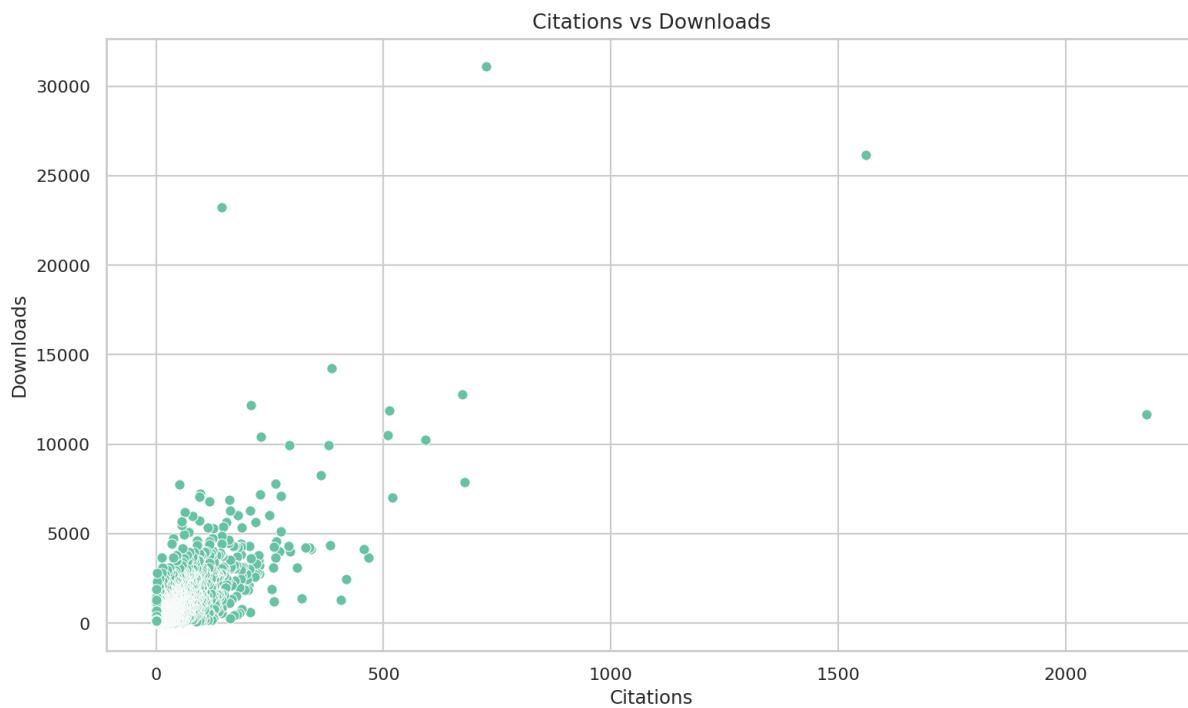
Figure 5. Top Keywords

The top keywords are visual analytics, visualization, and information visualization.

Cross-Metric Relationships

Citations vs Downloads

Examining the relationship between citations and downloads assesses whether download interest aligns with scholarly impact. This can indicate the practical relevance of research.

*Figure 6. Citations vs Downloads*

The analysis includes 3871 data points with a Spearman correlation of 0.66.

Award Share by Conference

Analyzing award share by conference reveals which venues have higher recognition intensity. This can guide authors in targeting prestigious conferences.

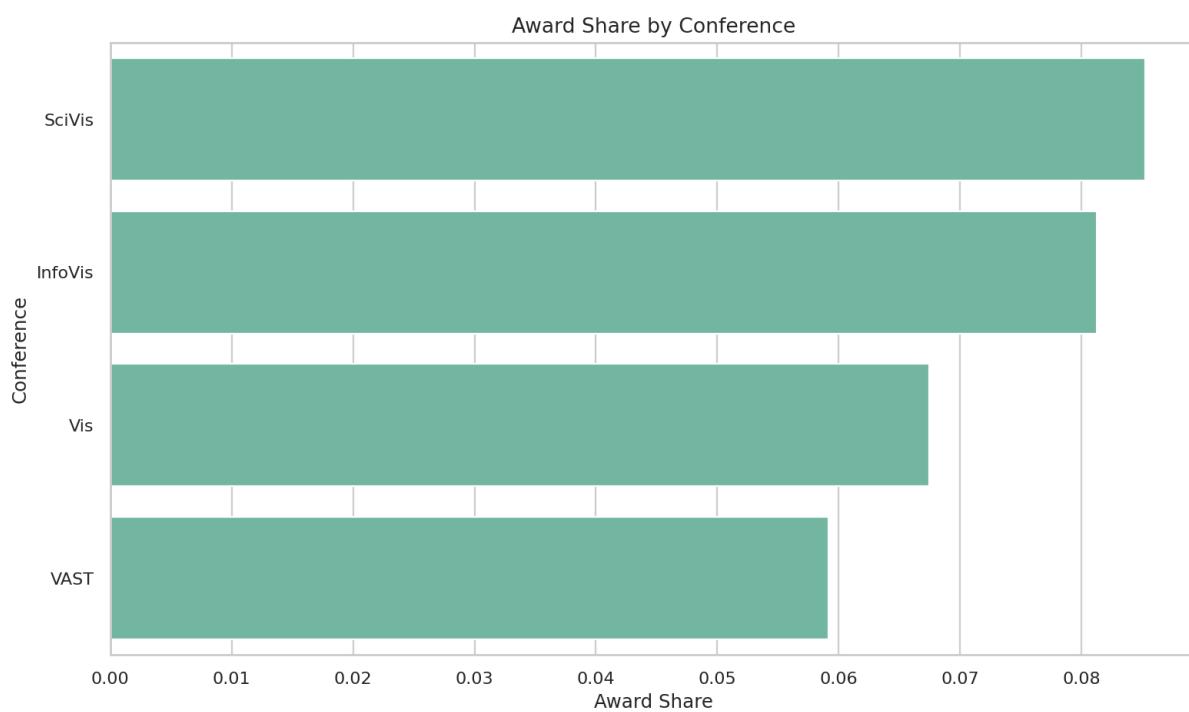


Figure 7. Award Share by Conference

Among 4 conferences, SciVis has the highest award share at 9%.