Google Trends for Ontology Terms

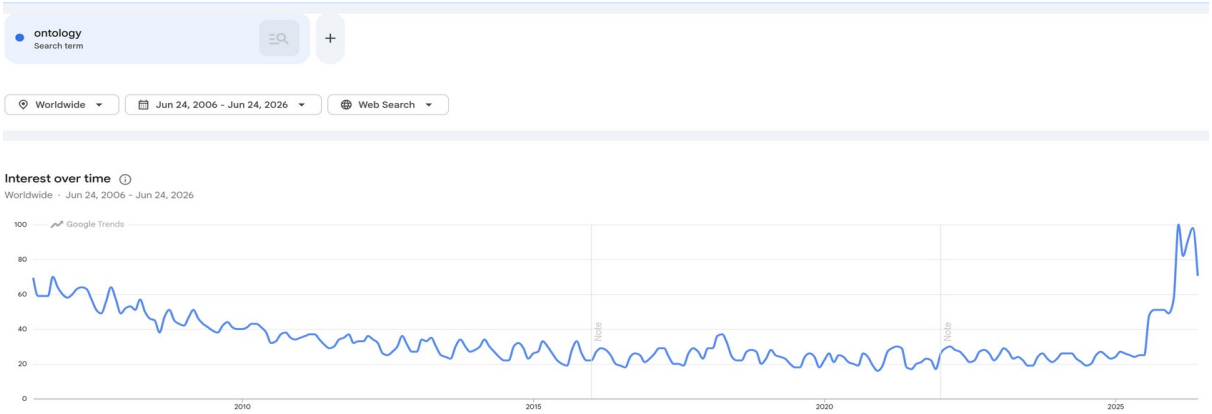
Introduction

The results of a Google Trends exploration depends heavily on:

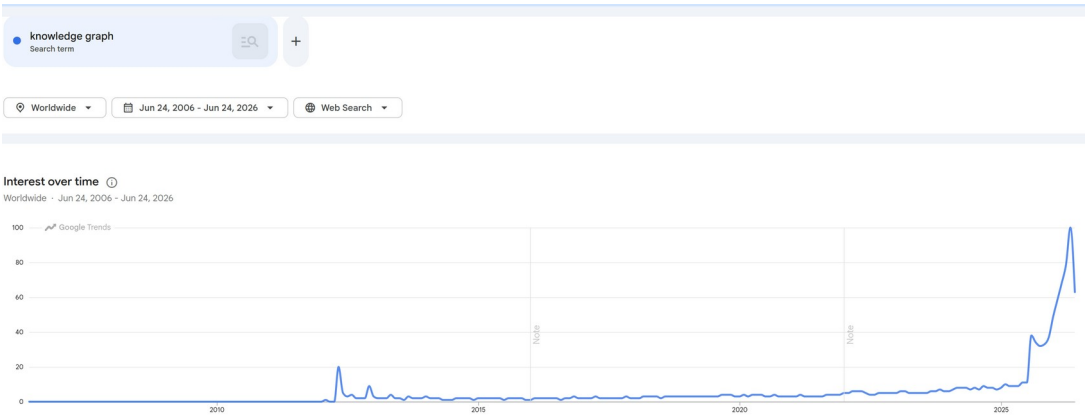
1. The period of time.
    - The trend graph is normalized so that the maximum is 100%. If several terms are being compared, then the trend graph is normalized so that the maximum of all of the terms is 100%.
    - Google Trends was launched on 11 May 2006, but allows periods that start before Google Trends was launched. It seems prudent to use a period that does not predate Google Trends. I used the 20 year period from 24 June 2006 to 24 June 2026.
2. The type of term.
    - For example, “Ontology” can be a “Search term”, a “Field of study” or “Information Science”.
    - The Google Trends documentation recommends that one should only compare terms of the same type. However, it is not always possible to do this. For example, “Ontology” can be a Field of Study, but “Web Ontology Language” cannot be a Field of Study.
3. The actual term.
    - Synonyms generally produce different results. For example, “OWL” and “Web Ontology Language” produce very different results. Perhaps this is because “OWL” is confused with the bird.
    - However, Google distinguishes “OWL” Search term from “Owl” Bird, and the trend graph for “Owl” Bird is not below the trend graph for “OWL” Search term.
4. The region.
    - I always used “Worldwide”.
5. Type of search.
    - For example, “Web Search”, “News Search”, “Image Search”, etc.
    - I only used “Web Search”.
6. When the survey was conducted.
    - The trends in this document were requested on 25 June 2026.
    - The sub-sampling technique that Google uses for their analysis means that the time when the survey was performed has significant effects. Consequently, the surveys in this document need not be reproducible.
7. The trend data is about searches for terms, and may not measure interest in the term, topic or field of study.
    - For example, someone who is familiar with ontologies is much less likely to search for the term “ontology” than someone who has recently heard about them. This suggests that the Google trend data need not always be a measure of interest in the term. If a term represents a recent event, then Google search data over a short period of time (days or weeks) is likely to be a good measure of interest in the term. However, over longer periods (months or years), the search trend may be better modeled as the rate of increase of interest over time.
    - Furthermore, there are many other paths for learning about ontologies than doing a Google search. For example, if someone saw the term “ontology” on a web document, they might use a link in the document rather then perform a search, or they might look at the Wikipedia page for ontology. In general, a more mature subject area would have less need for global searches.
    - I used the term “web search activity” rather than “interest” in this article.

Comparing Search Terms

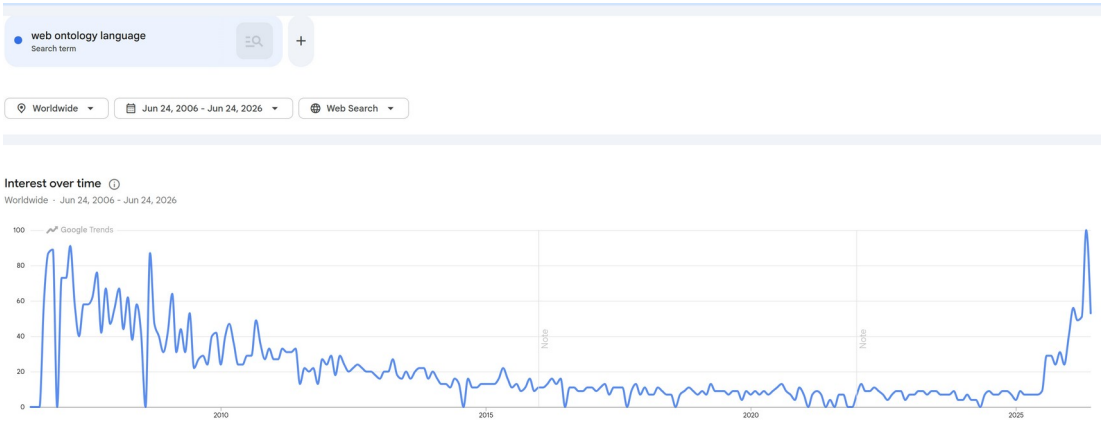
1. The trend for “ontology” declined over the last 20 years, but only by a factor of around 3, and in 2026 search activity increased above what it was 20 years ago.



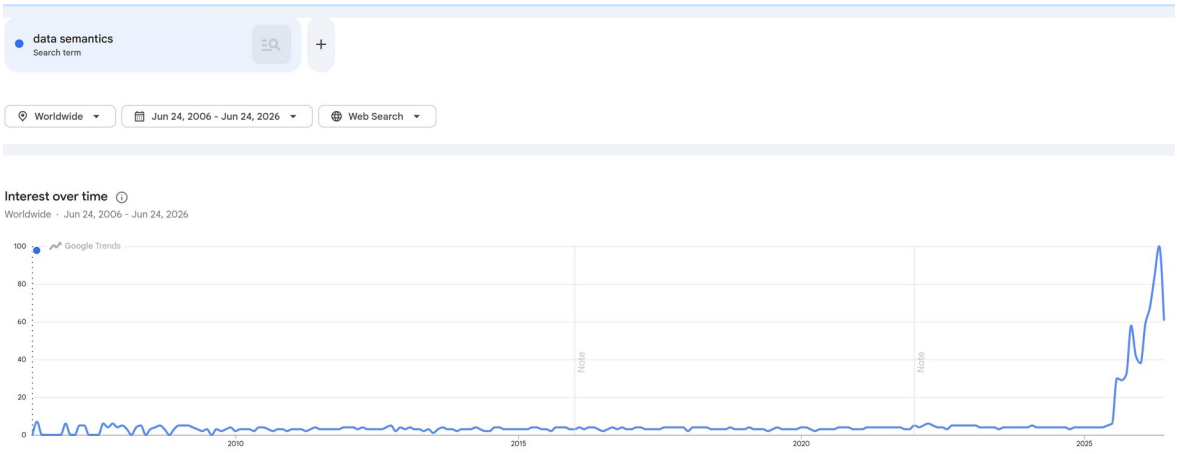
2. The trend for “knowledge graph” is surprising. There was little search activity until 2026.



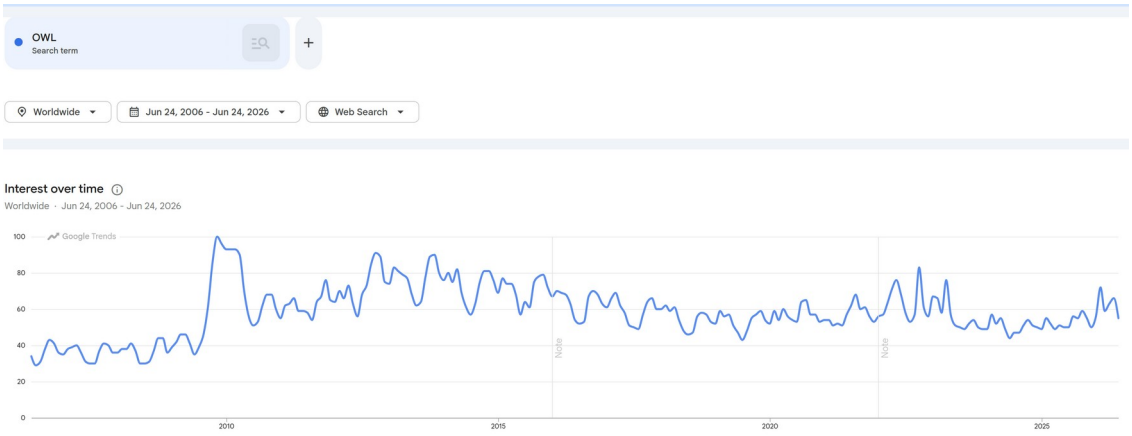
3. The trend for “web ontology language” declined by over an order of magnitude, but increased in 2026.



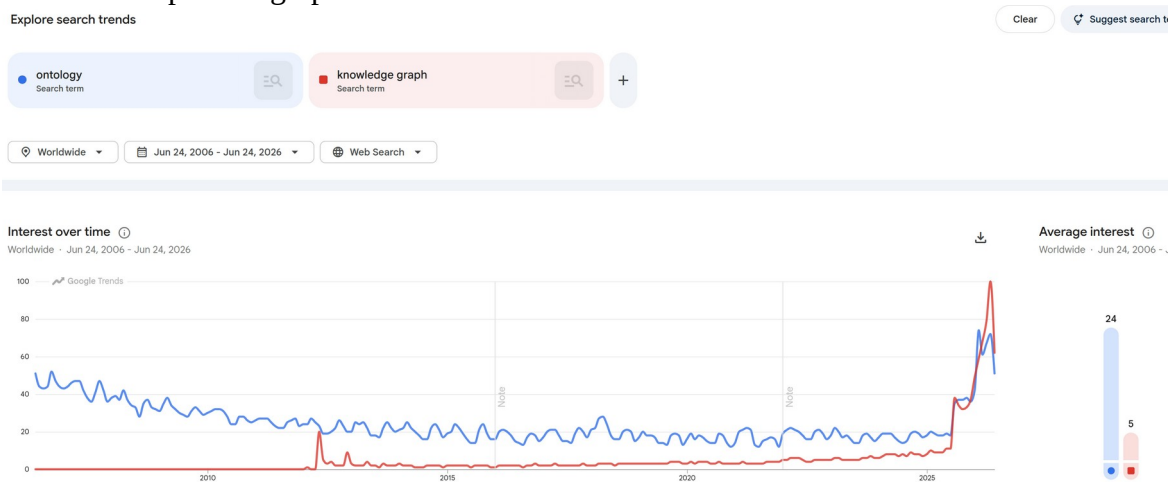
4. The trend for “data semantics” is similar to the trend for “knowledge graph”.

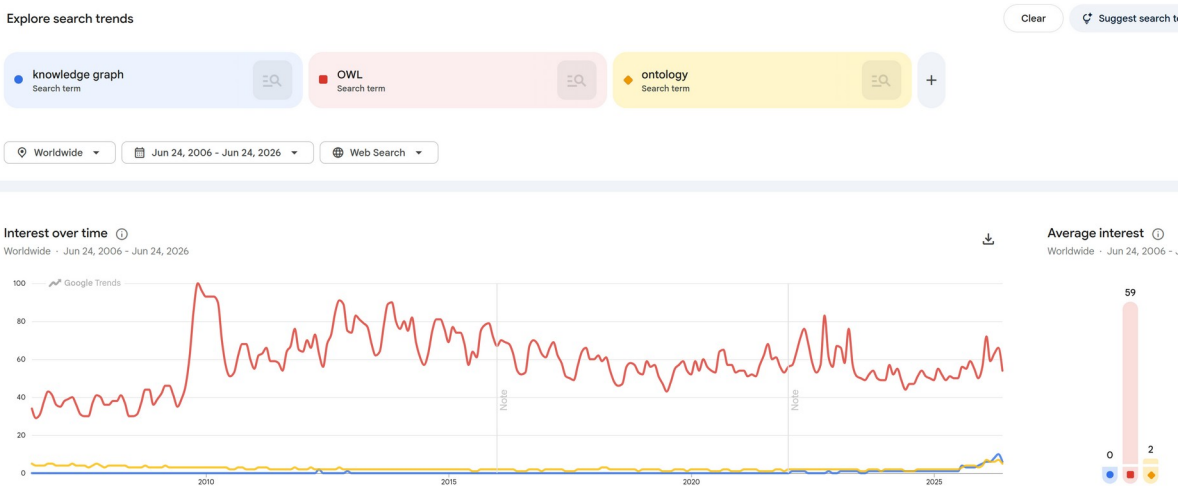


5. The trend for “OWL” is relatively constant.



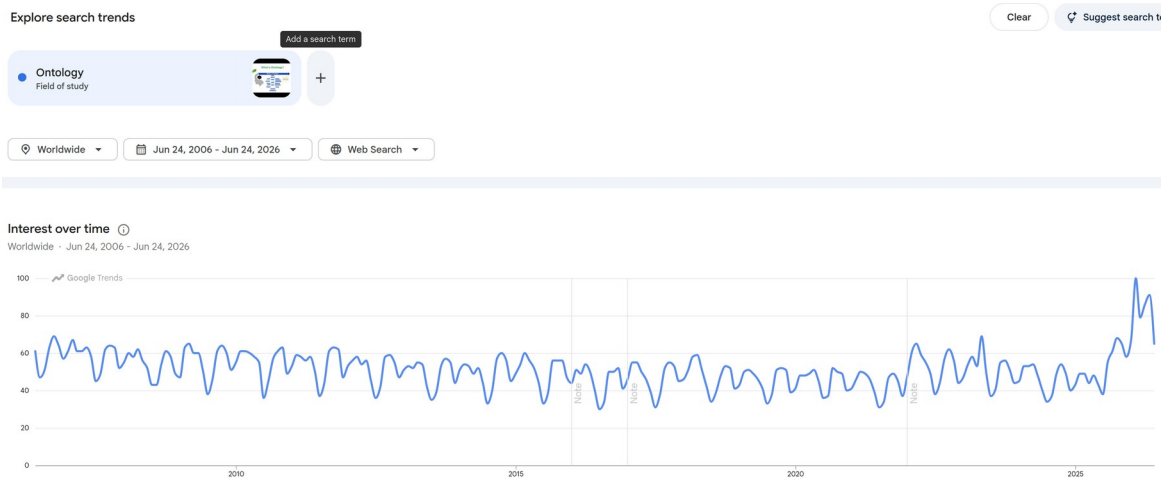
Here are some comparison graphs.



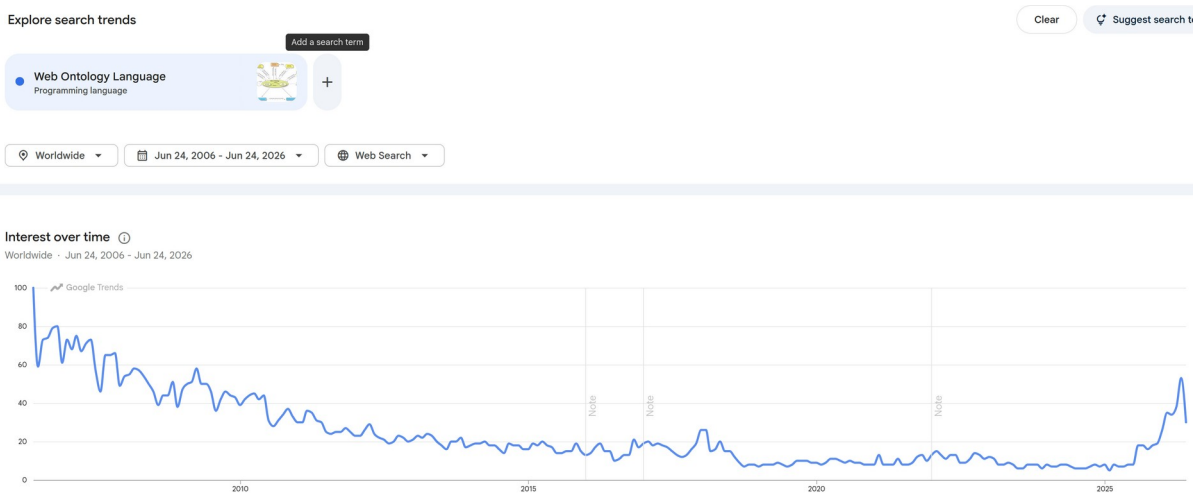

Explore search trends
Clear
Suggest search t
knowledge graph
Search term
OWL
Search term
ontology
Search term
Worldwide
Jun 24, 2006 - Jun 24, 2026
Web Search
Interest over time
Worldwide · Jun 24, 2006 - Jun 24, 2026
Google Trends
100
80
60
40
20
0
Note
Note
2010
2015
2020
2025
Average interest
Worldwide · Jun 24, 2006 -
59
0
2

Comparing Field of Study

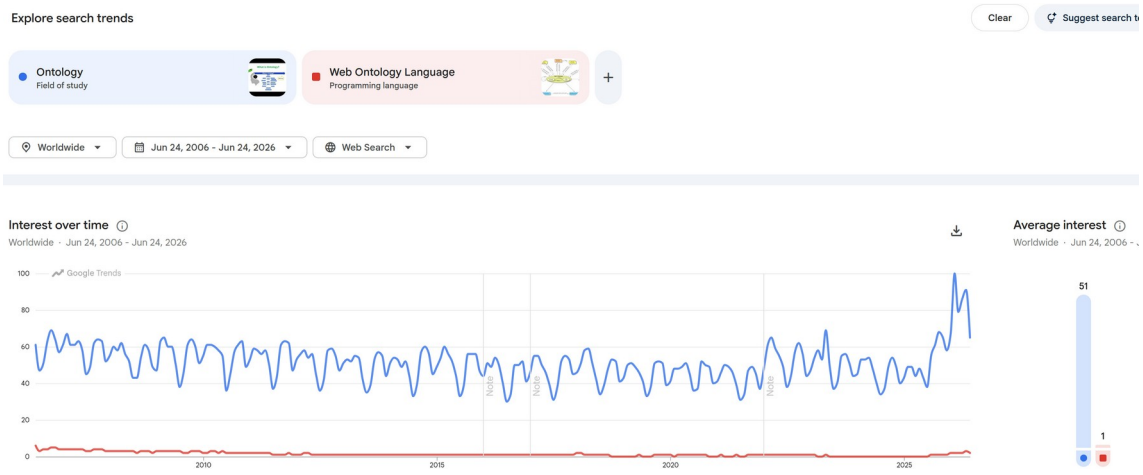
Ontology as a field of study is relatively constant with a small increase in search activity in 2026.



The web activity for Web Ontology Language as a programming language has declined by more than an order of magnitude, but recently increased.

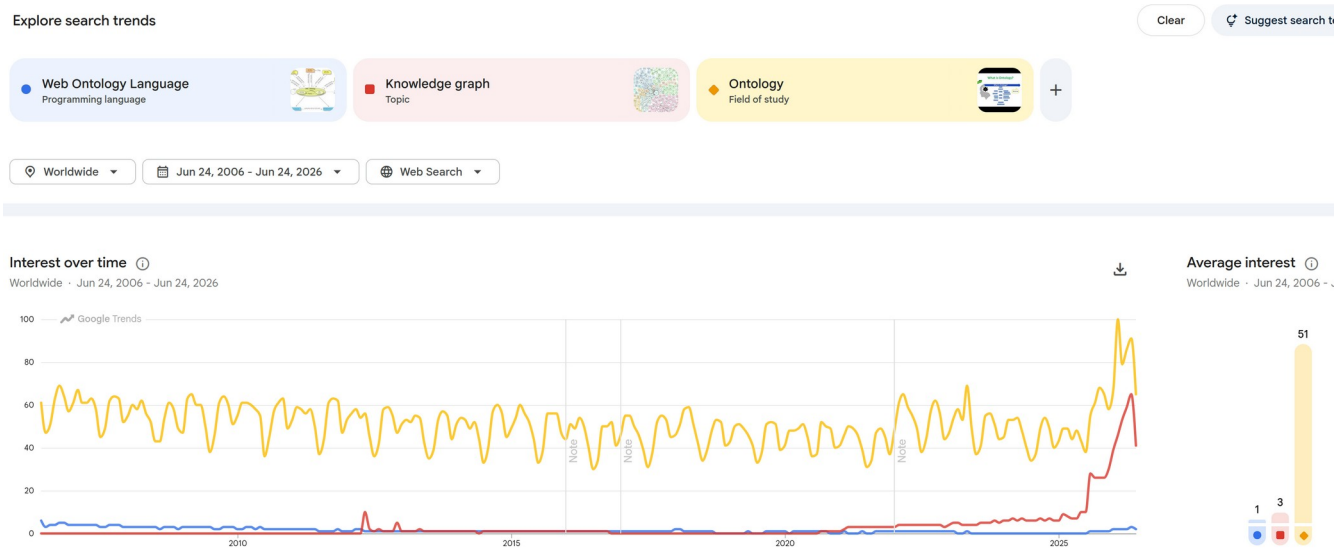


Here is a comparison of ontology as a field of study with Web Ontology Language:



Mixed Comparison

It is not recommended to mix types of term, so the following comparison may not be valid:



Accuracy and Usefulness of Web Search Trends

There have been many research studies showing that Web search activity levels correlate with stock market returns and volatility over short periods of time. Other macroeconomic indicators also correlate, sometimes over a year in advance.

However, a group of researchers at Wellesley College examined data from Google Trends for predicting elections and concluded that Google Trends is not as effective as traditional methods or even random chance. Humorous aside: The groundhog on Groundhog Day is apparently a better prognosticator of weather than Google Trends is of elections.

This suggests that one should not use Google Trends by itself for decision making.