Datasheet for Google Trends data (Search Interest)

Motivation for Dataset Creation

- Created by Google to analyze relative search interest of search queries over custom time ranges.
- The data can also be used to assess search interest in different categories, and regions.

Dataset Composition

- Multiple instances with explicit relations between each other i.e. country with keyword, a category with keyword where the range of popularity is standardized between 0-100 (relative).
- The data points display interest relative to the highest point in the time frame for a given country and category.
- Data consists of dates and numerical data with identified subpopulations sourced directly from and by google itself.

Data Collection Process

- Google records search based on terms and not personally identifiable searches in its large data warehouses.
- We sampled data deterministically on search interest of the term 'startups' from 2004 to 2014.
- The population is the search interest for all terms that were searched for on Google.
- The missing information for any category means that the search has insufficient data. No known errors or sources of noise were identified in the available data.

Data Preprocessing

 For our use case, we collected data on relative search interest for the topic 'startups' in the USA (2004-2014) using the Pytrends API with a specific payload. Appropriate renaming and indexing of the interest levels were applied.

Dataset Distribution

- The trends data is distributed via an API and is updated daily.
- The terms set by Google include use case limitations, access methodology, and nonexclusivity. More on:

https://developers.google.com/terms

Dataset Maintenance

- Google maintains search activity data that is anonymized (no one is personally identified), categorized (determining the topic for a search query), and aggregated (grouped together) as a display of interest transparency in its community of users.
- There is no mechanism for a third party to augment Google trends data.
- The Pytrends API is not an official or supported API.

Legal & Ethical Considerations

- The graph extracted is owned and protected by Google's Terms of Use.
- Since no personal data is stored, GDPR does not apply.
- Since data is normalized to the time and location of queries, it is likely to be appropriate for projects that analyze 'topical interest' as a feature.
- An ethical constraint must be to account for the search activity that is reflected due to automated searches/spam queries in Google as they do not reflect the public interest and can be deceptive at large.