Technical Documentation

ANTEDATA

Dictionary

Attribute	Details	Example
Date	Release Date weekly on Mondays	2025-01-20
Ticker	Ticker or ISIN	HUBS
Source	For Example Jobs, Repo, etc. or Aggregate	Jobs
RawCount	Raw Count of Observations	24
ActChng	Change in Activity, standardized (normal distributed)	-0.03
TrendRank	Trend of Activity, ranked against universe (0-100%)	84%

Example:

date	ticker	source	RawCount	ActChng	TrendRank
<date>	<chr>	<chr>	<dbl>	<dbl>	<dbl>
2025-01-06	SNOW	Freelancer	2	0.0675	0.568
2025-01-06	SNOW	GH_forks	69	-0.294	0.0123
2025-01-06	SNOW	GH_pushes	1635	-0.312	0.851
2025-01-06	SNOW	GH_stars	590	0.119	0.0795
2025-01-06	SNOW	StackO	20	0.559	0.955
2025-01-06	WIX	Aggregate	NA	-2.09	0.211
2025-01-06	WIX	Apps	154603	-0.602	0.144
2025-01-06	WIX	Freelancer	54	0.0254	0.608
2025-01-06	WIX	GH_pushes	0	-0.352	0.161
2025-01-06	WIX	Google_GB	41	-1.01	0.153

Explanation of Data Fields

Date:

The Data is a weekly timeseries, defined and released on Mondays (e.g. 20.01.2025).

The Counts are point-in-time data with the exception of Google Trends.

In the case of Google Trends and Apps, the observations are already 1 week old as scraping takes several days.

Ticker: Ticker Symbol

Source:

The Web Platform on which Activity was measured. The occurrence of keywords / brands on those platforms is measured each week.

Freelancer	Project Postings on Freelancer.com	Link to Source
StackO	Discussions on StackOverflow	Link to Source
GH_forks, GH_pushes, GH_stars	GitHub Repositories can be forked, pushed and starred	Link to Source
Google_glob, Google_GB	Google Search Counts as provided by Google Trends. Regions Global and UK are available. The Search Counts are expressed as a value between 0-100. And the whole history changes each week (!).	Link to Source
Apps	App Downloads on Google Play and Apple Store	

Aggregate	An aggregation of all other sources. It calculates the sum of Sources, normalized by Standard Deviation. Only a Value for Activity Changes, not RawCount is provided.
	
	`merge( TRND_adj_glob / sd(tail(TRND_adj_glob,60)), TRND_adj_stars / sd(tail(TRND_adj_stars,60)) … ,join="left")`
	`TRND_adj_comb <- colCombine(TRND_adj_comb, fun="sum")`	

RawCount:

The Number of occurrences for a ticker found on a platform each week. Each ticker/company is measured via its software brands which form the keywords in a query on the platform.

Weekly Change	`TRND - stats::lag(TRND,1)`
Standardization of each Ticker	`TRND / matrix(rep( sapply(TRND , sd)+2 , dim(TRND)[1]), ncol=dim(TRND)[2], byrow=T)`
4 week change	`TRND[,] <- mav(TRND,4)`

ActivityChange:

Just a function of RawCount to make tickers comparable with each other: The rolling 4-week change in RawCount, normalized by its standard deviation.

Calculating 1-year linear trend	`SIG <- sig_trend(TRND, 52 ,cusum=T)`
Ranking Trends over all Tickers	`SIG[,] <- rowRanks(SIG, ties.method="average")/ncol(SIG)`

TrendRank:

Just a function of RawCount to identify longer term trends and rank them within tickers. 1. calculating the **1-year linear trend**, 2. Rank Significance of Trend within all tickers.

Delivery of Data

A Data Excerpt is openly accessible from GoogleCloud as a .csv via:

https://storage.googleapis.com/antedata_open/AllDat_excerpt_time.csv

https://storage.googleapis.com/antedata_open/AllDat_excerpt_ticker.csv

Integration of Data – Creating Timeseries

Example R Code - Create a TimeSeries of Counts on Freelancer.com (Tickers in Columns):

1. Load CSV

```
df <- read.csv(
"https://storage.googleapis.com/antedata_open/AllDat_excrpt.csv")
```

2. Filter and Spread Data to Matrix (Date vertical, Tickers horizontal)

```
df <- spread(
  df[ which(df$source == "Freelancer"),c("date","ticker","RawCount")
], key="ticker", value="RawCount")
```

3. Create Timeseries Object xts

```
df <- as.xts( df[,2:ncol(df)] , order.by=as.Date(df[,1]) )
```

Example Python Code:

```
df = pd.read_csv(

"https://storage.googleapis.com/antedata_open/AllDat_excrpt.csv")

df = df.loc[df['source'] == 'Freelancer', ['date', 'ticker',
'RawCount']]

df = df.pivot(index='date', columns='ticker', values='RawCount')
```

Example Result TimeSeries

	CRM	DBX	HUBS	NVDA	OKTA	SNOW	WIX
2024-11-18	50	5	17	7	1	2	63
2024-11-25	55	5	20	3	2	4	66
2024-12-02	60	10	18	12	3	2	49
2024-12-09	58	9	25	4	5	1	52
2024-12-16	53	7	15	7	4	2	39
2024-12-23	41	4	24	4	8	3	34
2024-12-30	22	7	17	3	1	2	30
2025-01-06	44	7	24	12	3	2	54
2025-01-13	44	4	24	6	0	3	54
2025-01-20	46	14	19	8	3	1	64

Contact

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