





Overview

Constantly emerging technologies and evolving solutions within the software sector continue to create trading opportunities. As software clients integrate new solutions and the coding community adopts evolving trends, the need for real-time tracking of integration, development, and usage across software products becomes even more critical.

AnteData monitors the digital footprints left behind by software buyers and developers. Each week, it measures a wide range of activity on key platforms—such as job postings, Q&A platforms, search behavior, code repositories, and app downloads. This broad, frequent, and historical dataset allows for the reliable and early identification of trends.

The data measures the digital momentum of ca. 140 IT companies, enabling profitable investments and trading strategies.

Source Type	Example	Activity	Actors	History	# Stocks covered
 Job Marketplaces	Freelancer.com	Posting	Buyers, Programmers	7 years	117
 Search-Engines	Google	Searching	Buyers, Programmers	5 years	229
 Professional Media	Stack Overflow	Q & A	Programmers	7 years	98
 Public Repositories	GitHub	Coding	Programmers	7 years	133
 App Marketplaces	Google Play	Downloading	Users	10 years	158

Coverage

The detailed coverage of the Data, by tickers and source can be found at:

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

The data covers ca. 130 listed and ca. 50 private equities. Private equities don't have a Bloomberg ticker.

Dictionary

Attribute	Details	Example
date	Release Date weekly on Mondays	2025-01-20
ticker	Ticker	HUBS
BBticker	Bloomberg Ticker	HUBS
source	For Example GitHub, Freelancer etc. or Aggregate	Freelancer
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	BBticker	source	RawCount	ActChng	TrendRank
<date>	<chr>	<chr>	<chr>	<dbl>	<dbl>	<dbl>
2025-01-06	SNOW	SNOW US	Freelancer	2	0.0675	0.568
2025-01-06	SNOW	SNOW US	GH_forks	69	-0.294	0.0123
2025-01-06	SNOW	SNOW US	GH_pushes	1635	-0.312	0.851
2025-01-06	SNOW	SNOW US	GH_stars	590	0.119	0.0795
2025-01-06	SNOW	SNOW US	StackO	20	0.559	0.955
2025-01-06	WIX	WIX US	Aggregate	NA	-2.09	0.211
2025-01-06	WIX	WIX US	Apps	154603	-0.602	0.144
2025-01-06	WIX	WIX US	Freelancer	54	0.0254	0.608
2025-01-06	WIX	WIX US	GH_pushes	0	-0.352	0.161
2025-01-06	WIX	WIX US	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 RawCounts 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 – either Yahoo or Bloomberg Tickers available.

The BBticker of non-listed equities is NA and their ticker starts with “ZZ” or “YY”

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
StackO	Discussions on StackOverflow
GH_forks, GH_pushes, GH_stars	GitHub Repositories can be forked, pushed and starred
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 (!).
Apps	App Downloads on Google Play and Apple Store
Aggregate	<p>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.</p> <pre>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")</pre>

Links to Sources:

<https://www.freelancer.com/jobs/2/?keyword=twilio&status=all>

<https://stackoverflow.com/search?tab=newest&q=twilio>

<https://github.com/topics/twilio>

<https://trends.google.com/trends/explore?date=today%205-y&q=twilio>

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

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	<code>SIG <- sig_trend(TRND, 52 ,cusum=T)</code>
Ranking Trends over all Tickers	<code>SIG[,] <- rowRanks(SIG, ties.method="average")/ncol(SIG)</code>

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

Data Excerpts are openly accessible from GoogleCloud:

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

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

To test our full data sample, please sign a standard data test license with us.

Integration of Data – Creating Timeseries

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

in R: <https://github.com/antedat/CodingData/blob/main/integrate.R>

in Python: <https://github.com/antedat/CodingData/blob/main/integrate.ipynb>

Those Code Examples return the following kind of 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

Help & Contact

If you have technical questions, please don't hesitate to contact:

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