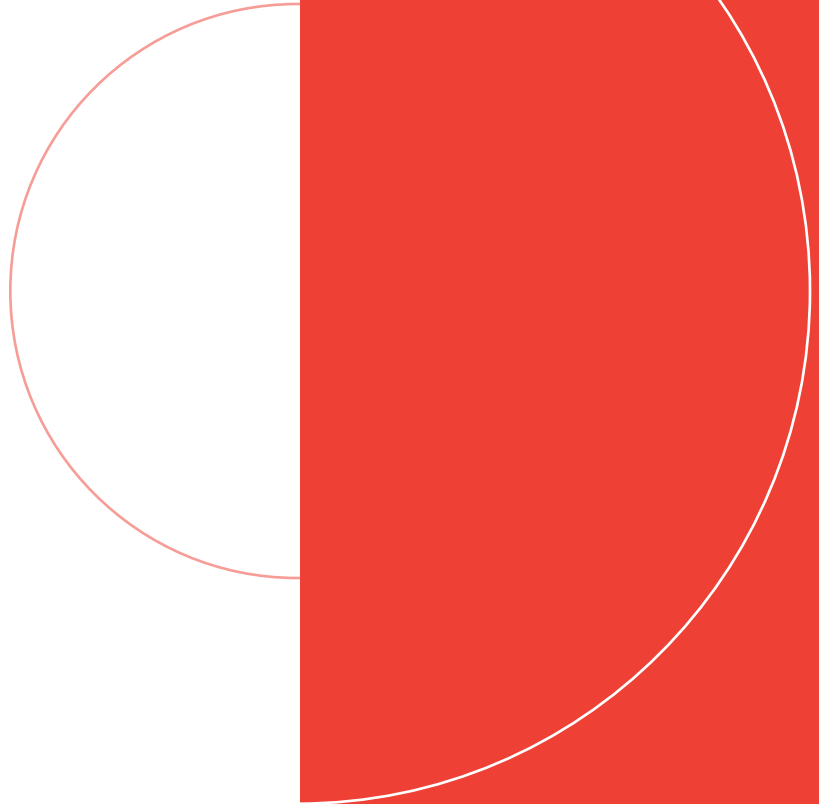




ROSS Index

Annual report 2023





Runa Capital: a global VC firm for tech-savvy founders

Runa Capital is a global VC firm, founded in 2010 by entrepreneurs, who had built enterprise software companies such as [Acronis](#), [Parallels](#) and [Acumatica](#).

Runa invested in 100+ tech companies from Europe and the US, and currently focuses on early-stage deep tech and enterprise software.

We love open-source startups and have funded [Nginx](#), [MariaDB](#), [n8n](#) and many other OSS companies at early stages.





ROSS Index: trending open-source startups

Runa Open Source Startup (ROSS) Index is a regularly updated ranking of trending open-source startups, based on the annualised growth rate (AGR) of GitHub stars at their repositories within a period.

Such an approach allows for highlighting those OSS products that were on developers' minds during the past quarter or year.

Our index has a transparent [methodology](#), which is measurable and focused on startups.

Criteria for startups in the ROSS index

1k+

repo stars at
beginning of period

<10

years since **foundation**

<\$100M

total **funding** raised
(based on public sources)



product connected to
open-source repos



not **acquired** or **public**
before end of period



225 unique startups have appeared in ROSS Index

225

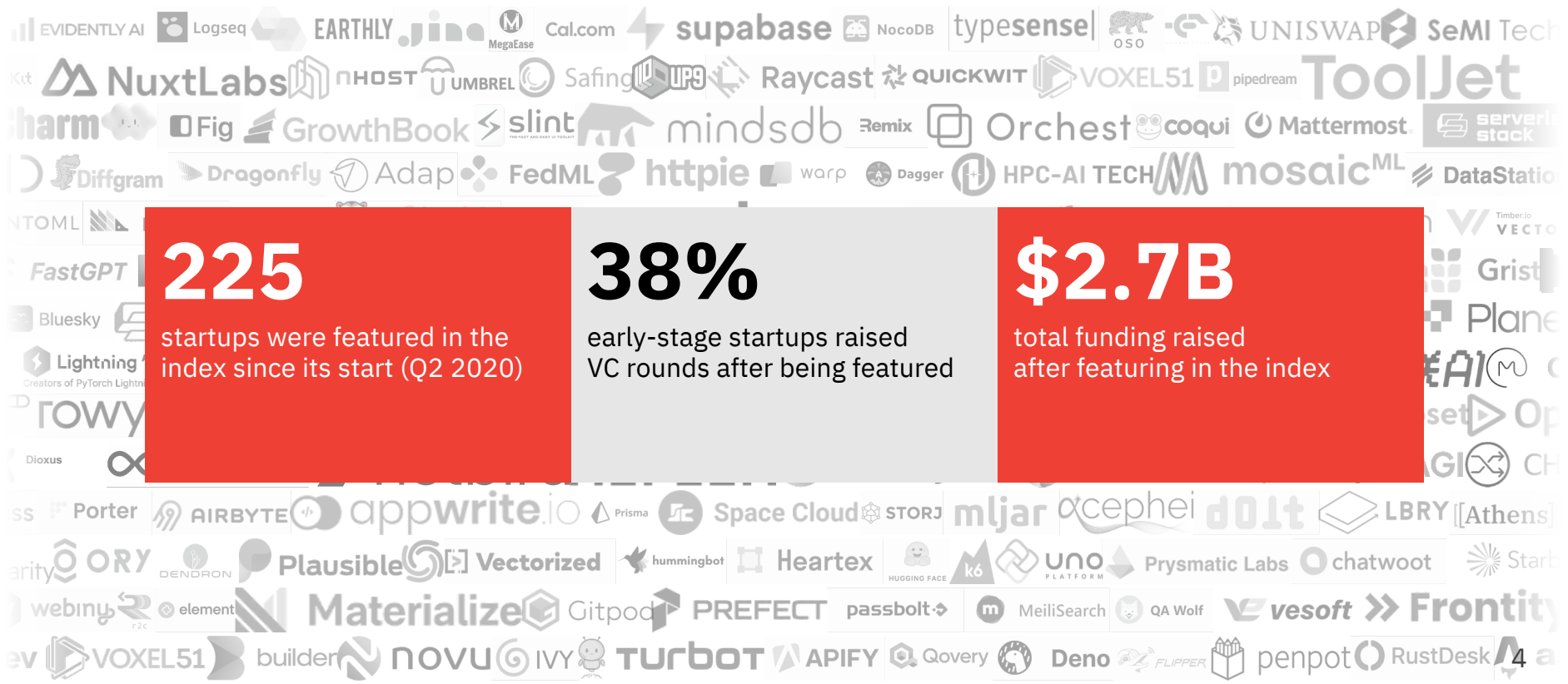
startups were featured in the index since its start (Q2 2020)

38%

early-stage startups raised VC rounds after being featured

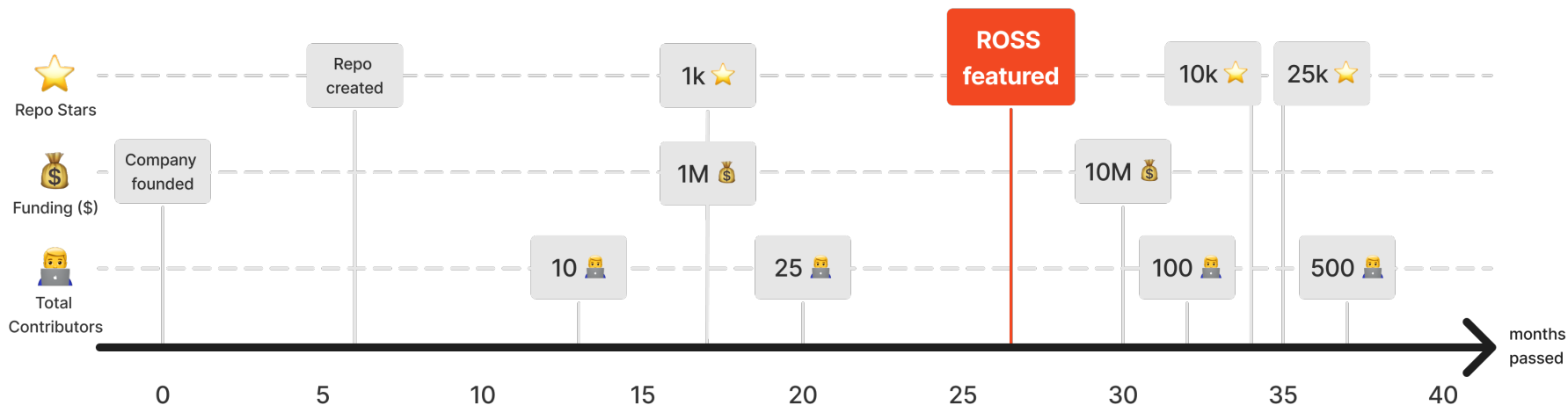
\$2.7B

total funding raised after featuring in the index





ROSS participants – median time to milestones



61%

companies raised at least \$1M

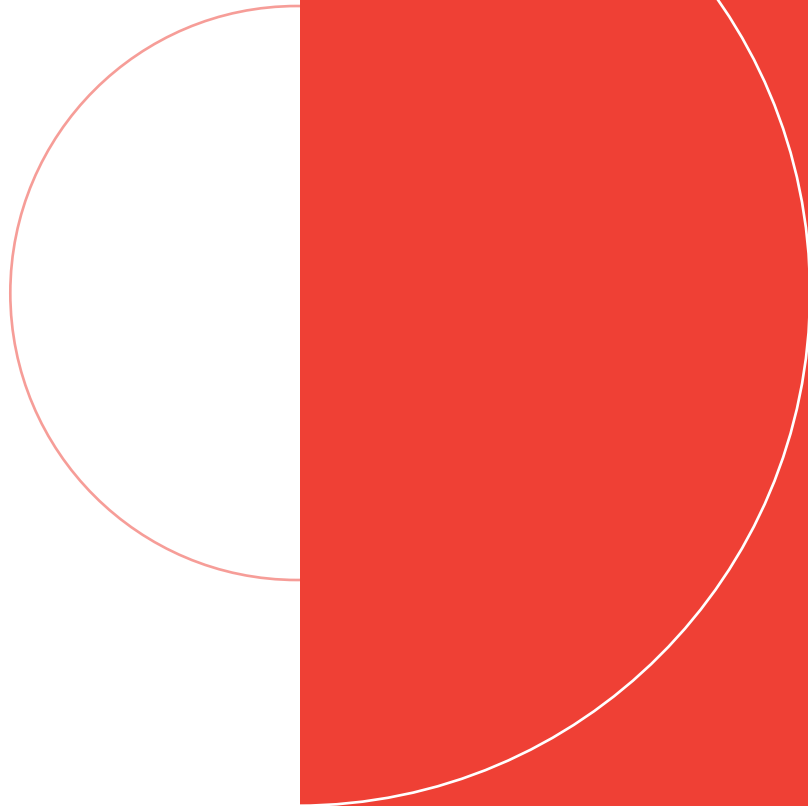
52%

companies raised at least \$10M after first \$1M



ROSS Index 2023

**Top 50 trending
open-source startups**





ROSS Index 2023

Top 50 trending open-source startups



Top 50 trending open-source startups in 2023

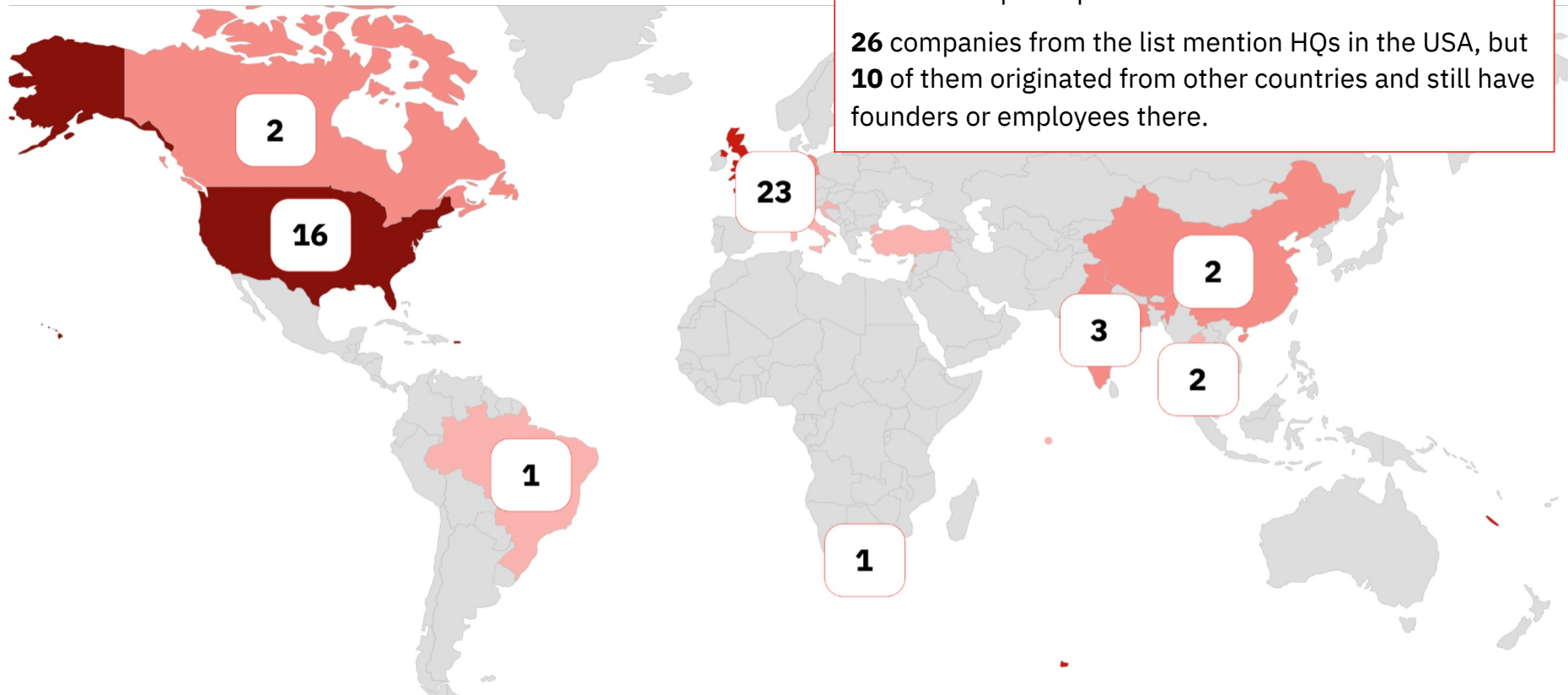
Company	Origin	Repository	🏠	💰	★	📈
1 LangChain	🇺🇸	langchain-ai/langchain	2023	10.0	72.5	51.21
2 Reflex	🇺🇸	reflex-dev/reflex	2022	5.5	14.5	10.60
3 AITable	🇨🇦	apitable/apitable	2022		11.0	6.63
4 Sismo	🇫🇷	sismo-core/sismo-badges	2021	10.0	16.2	5.85
5 HPC-AI	🇫🇷	hpcaitech/ColossalAI	2021	28.0	35.7	5.20
6 Massa	🇫🇷	massalabs/massa	2020	5.8	5.4	5.04
7 Windmill	🇺🇸	windmill-labs/windmill	2022		7.6	5.02
8 Resend	🇺🇸	resend/react-email	2023	3.5	10.7	4.99
9 Nebuly	🇺🇸	nebuly-ai/nebuly	2022		8.3	4.85
10 Qdrant	🇩🇪	qdrant/qdrant	2021	10.5	15.2	4.37
11 Astral	🇺🇸	astral-sh/ruff	2023	4.0	21.7	4.29
12 Formbricks	🇩🇪	formbricks/formbricks	2022		4.7	4.14
13 Infisical	🇺🇸	Infisical/infisical	2022	2.8	10.6	4.13
14 Wasp	🇩🇪	wasp-lang/wasp	2020	1.5	8.8	4.04
15 Krayin	🇮🇳	krayin/laravel-crm	2021		4.4	3.97
16 Shuttle	🇩🇪	shuttle-hq/shuttle	2019		5.0	3.43
17 Snapshot Labs	🇮🇳	snapshot-labs/snapshot	2021	4.0	5.3	3.40
18 Hanko	🇩🇪	teamhanko/hanko	2018	2.8	4.9	3.33
19 Manticore Search	🇩🇪	manticoresoftware/manticoresearch	2017		7.4	3.25
20 Nango	🇺🇸	NangoHQ/nango	2022	2.0	3.7	3.17
21 Turso	🇺🇸	tursodatabase/libsql	2021	7.0	5.7	3.15
22 ZITADEL	🇪🇸	zitadel/zitadel	2019	2.5	5.7	3.01
23 Nextcloud	🇩🇪	nextcloud/all-in-one	2016		3.2	2.99
24 Lago	🇺🇸	getlago/lago	2021	0.1	4.9	2.97
25 Dub	🇺🇸	dubinc/dub	2022		13.7	2.91

Company	Origin	Repository	🏠	💰	★	📈
26 Mage	🇺🇸	mage-ai/mage-ai	2020	11.8	6.1	2.87
27 Weaviate	🇩🇪	weaviate/weaviate	2019	67.7	8.5	2.80
28 Atuin	🇩🇪	atuinsh/atuin	2021		12.5	2.74
29 Refine	🇨🇳	refinedev/refine	2022	1	17.5	2.72
30 Htmlstream	🇩🇪	htmlstreamofficial/preline	2018		2.9	2.71
31 Voxel51	🇺🇸	voxel51/fiftyone	2018	15.7	6.2	2.65
32 Typebot	🇫🇷	baptisteArno/typebot.io	2020		4.1	2.59
33 Tldraw	🇩🇪	tldraw/tldraw	2022	4.7	29.4	2.57
34 Upscayl	🇮🇳	upscayl/upscayl	2023		20.7	2.53
35 Graphite	🇺🇸	GraphiteEditor/Graphite	2021		5.	2.45
36 Linen	🇺🇸	Linen-dev/linen.dev	2020	0.1	2.6	2.43
37 IceWhale Tech	🇨🇳	IceWhaleTech/CasaOS	2021	3.7	19.1	2.42
38 DioxusLabs	🇺🇸	DioxusLabs/dioxus	2021		15.1	2.40
39 Tamagui	🇺🇸	tamagui/tamagui	2021		8.7	2.39
40 Bluesky	🇺🇸	bluesky-social/atproto	2021	21	5.1	2.29
41 Tiny Corp	🇺🇸	tinygrad/tinygrad	2022	5.1	21.7	2.28
42 Keptio	🇮🇳	keptio/keptio	2020		2.6	2.27
43 Liveblocks	🇫🇷	liveblocks/liveblocks	2021	6.4	2.7	2.26
44 SimpleX Chat	🇩🇪	simplex-chat/simplex-chat	2021	0.4	4.7	2.25
45 robusta.dev	🇮🇳	robusta-dev/robusta	2021		2.2	2.24
46 Neural Magic	🇺🇸	neuralmagic/deepsparse	2017	50	2.6	2.23
47 PostgresML	🇺🇸	postgresml/postgresml	2022	4.7	4.9	2.23
48 TigerBeetle	🇰🇪	tigerbeetle/tigerbeetle	2022	6.4	3.4	2.21
49 Invoke AI	🇺🇸	invoke-ai/InvokeAI	2023	3.7	20.	2.21
50 Sealos	🇨🇳	labring/laf	2022		6.2	2.17

Origin – Founding Location, 🏠 – Year Company Founded, 💰 – Funding (\$M), ★ - GitHub Stars (k), 📈 - Annual Growth Rate of GitHub stars in 2023 (x)



ROSS Index 2023 participants by origin

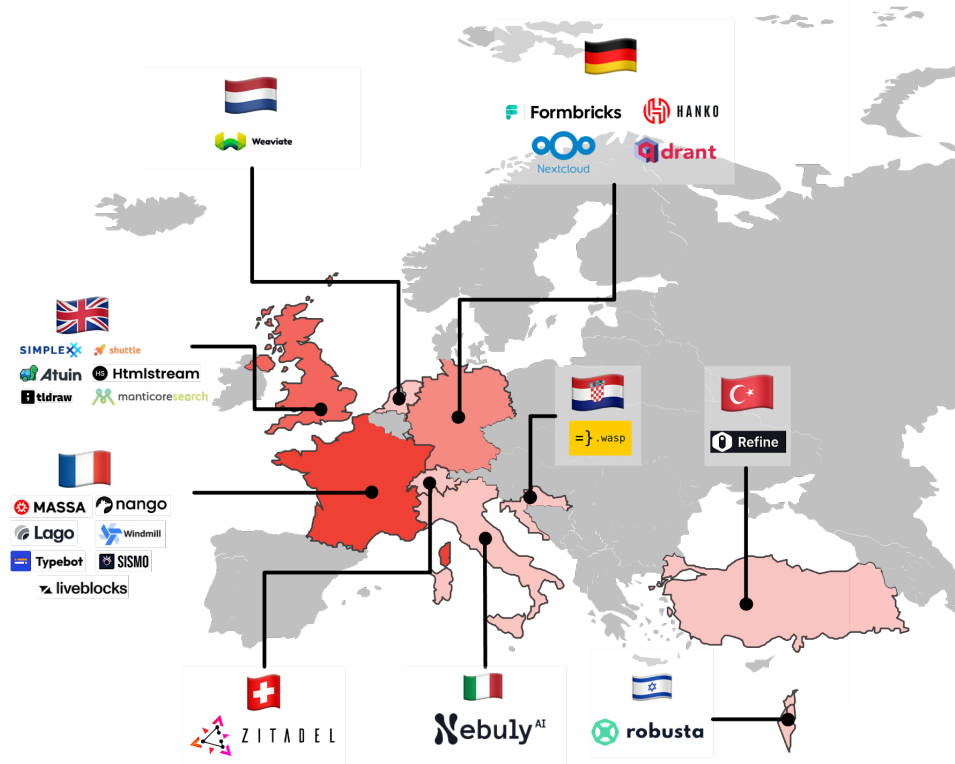


ROSS 2023 participants are from **17** different countries. **26** companies from the list mention HQs in the USA, but **10** of them originated from other countries and still have founders or employees there.



Trending OSS startups in Europe & Israel

Company	Origin	Repository	🏠	💰	★	📈
1 Sismo.io	🇫🇷	sismo-core/sismo-badges	2021	10	16.2	5.85
2 Massa	🇫🇷	massalabs/massa	2020	5.8	5.4	5.04
3 Windmill	🇫🇷	windmill-labs/windmill	2022		7.6	5.02
4 Nebuly	🇮🇹	nebuly-ai/nebuly	2022		8.3	4.85
5 Qdrant	🇩🇪	qdrant/qdrant	2021	10.4	15.2	4.37
6 formbricks	🇩🇪	formbricks/formbricks	2022		4.7	4.14
7 Wasp	🇩🇪	wasp-lang/wasp	2020	1.5	8.8	4.04
8 Shuttle	🇬🇧	shuttle-hq/shuttle	2019		5.0	3.43
9 Hanko	🇩🇪	teamhanko/hanko	2018	2.8	4.9	3.33
10 Manticore Search	🇬🇧	manticoresoftware/manticoresearch	2017		7.4	3.25
11 Nango	🇫🇷	NangoHQ/nango	2022	2.0	3.7	3.17
12 ZITADEL	🇩🇪	zitadel/zitadel	2019	2.5	5.7	3.01
13 Nextcloud	🇩🇪	nextcloud/all-in-one	2016		3.2	2.99
14 Lago	🇫🇷	getlago/lago	2021	0.1	4.9	2.97
15 Weaviate	🇫🇷	weaviate/weaviate	2019	67.7	8.5	2.80
16 Atuin	🇬🇧	atuinsh/atuin	2021		12.5	2.74
17 Refine	🇩🇪	refinedev/refine	2022	1.0	17.5	2.72
18 Htmlstream	🇬🇧	htmlstreamofficial/preline	2018		2.9	2.71
19 Typebot	🇫🇷	baptisteArno/typebot.io	2020		4.1	2.59
20 Tldraw	🇬🇧	tldraw/tldraw	2022	4.7	29.4	2.57
21 Liveblocks	🇫🇷	liveblocks/liveblocks	2021	6.4	2.7	2.26
22 SimpleX Chat	🇬🇧	simplex-chat/simplex-chat	2021	0.4	4.7	2.25
23 robusta.dev	🇮🇹	robusta-dev/robusta	2021		2.2	2.24



















Origin – Founding Location, 🏠 – Year Company Founded, 💰 – Funding (\$M), ★ - GitHub Stars (k), 📈 - Annual Growth Rate of GitHub stars (x)



Top-10 startups by added stars

ROSS Index is based on relative growth of GitHub stars of repos, calculated during the target period. However, several noteworthy OSS startups created popular repos only in 2023, so they fall outside of the ROSS Index. We would like to highlight them too – based on the absolute number of added stars in 2023.

	Company	Origin	Repository			 2022	 2023		
1	AutoGPT		Significant-Gravitas/AutoGPT	2023	12.0		155.6	+155.6	–
2	LangChain		langchain-ai/langchain	2023	10.0	1.4	72.5	+71.1	51.2
3	Nomic AI		nomic-ai/gpt4all	2022	17.0		58.5	+58.5	–
4	CodeCrafters		codecrafters-io/build-your-own-x	2022		179.9	235.3	+55.4	1.3
5	PrivateGPT Docs		imartinez/privateGPT	2023			45.7	+45.7	–
6	ScreenshotToCode		abi/screenshot-to-code	2023			32.5	+32.5	–
7	Bun		oven-sh/bun	2022	7.0	36.4	66.4	+30.0	1.8
8	Suno		suno-ai/bark	2022			29.6	+29.6	–
9	HPC-AI		hpcaitech/ColossalAI	2021	28.0	6.9	35.8	+28.9	5.2
10	Ollama		ollama/ollama	2023			28.8	+28.8	–



Top-10 startups by active contributors growth

Active contributors are the core of OSS communities, and it's interesting to see which startups are the fastest-growing in 2023 by this dimension. To find them, we calculate **Yearly Active Contributors Absolute Growth (YAC AG)** metric, where active contributors are those who made at least one commit throughout the last year.

	Company	Origin	Repo	🏢	💰	★ 2023	YAC 2022	YAC 2023	YAC AG
1	LangChain		langchain-ai/langchain	2023	10.0	72.5	44	1708	+1664
2	AutoGPT		Significant-Gravitas/AutoGPT	2023	12.0	155.6		697	+697
3	LlamaIndex		run-llama/llama_index	2023	8.5	26.0	7	541	+534
4	MindsDB		mindsdb/mindsdb	2017	54.4	19.4	187	554	+367
5	ILLA Cloud		illacloud/illa-builder	2022		9.1	16	305	+289
6	Astral		astral-sh/ruff	2022		21.7	60	298	+238
7	Raycast		raycast/extensions	2020	17.9	4.4	591	811	+220
8	Bun		oven-sh/bun	2022	7.0	66.4	148	360	+212
9	Typst		typst/typst	2022		24.5	2	212	+210
10	Cal.com		calcom/cal.com	2021	32.4	25.7	139	349	+210

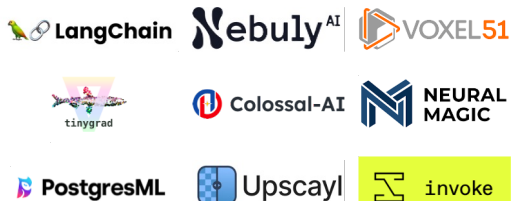


Trends in open-source in 2023

This was a year of **AI** – 9 startups belong to this category, accounting for almost a 5th of the index.

Naturally, **Databases** are also well-represented this year, with 2 out of 5 participants being Vector Databases, specialized for LLM's.

AI Frameworks & Tooling



Business Apps



Database & Search



Web Dev Frameworks





Trends in open-source in 2023

This was also a year of **development** – together with **Web Development Frameworks**, tools simplifying **Cloud Deployment, Identity and Secrets management**, and **improving developer productivity** when combined, account for a 3rd of the index.

Cloud Deployment



IAM & Secrets



Data Pipelines & Integrations



Communications



Developer Productivity



Blockchain & Crypto

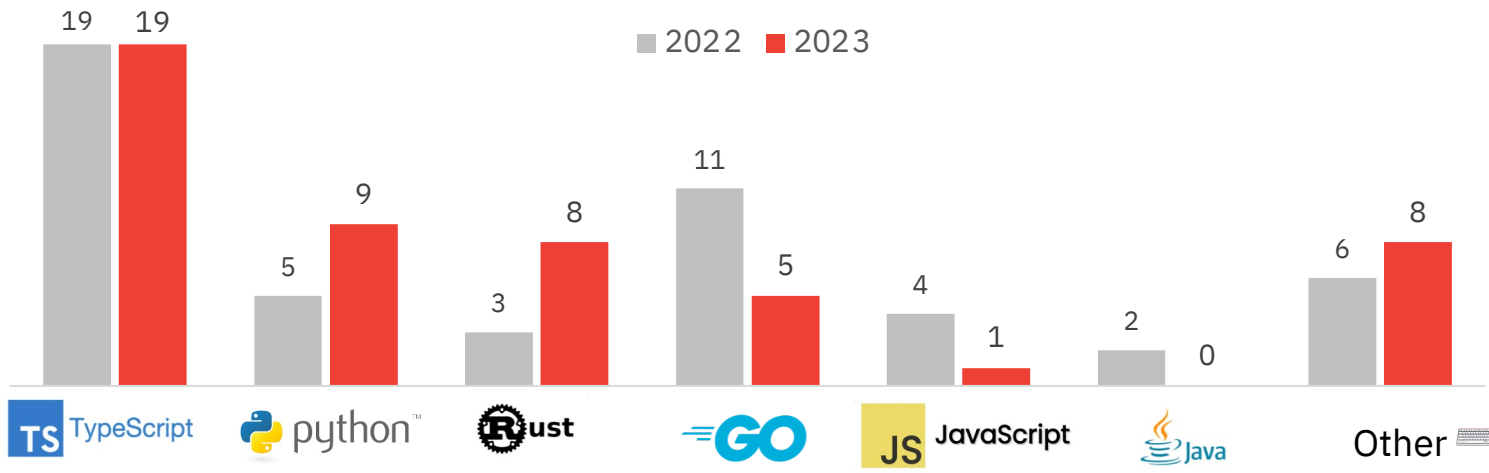




Trending programming languages

ROSS Index repos show trends in the developer community, especially if compared with 2022 data:

- **More diversity** – 12 languages were used by ROSS index participants 2023 vs 10 in 2022
- **Typescript** remains the most popular language (19 / 50), **Python** gets more attention thanks to the AI wave
- **Rust** has got strong momentum (used for many dev tools and web apps), while **Go** seems to lose popularity

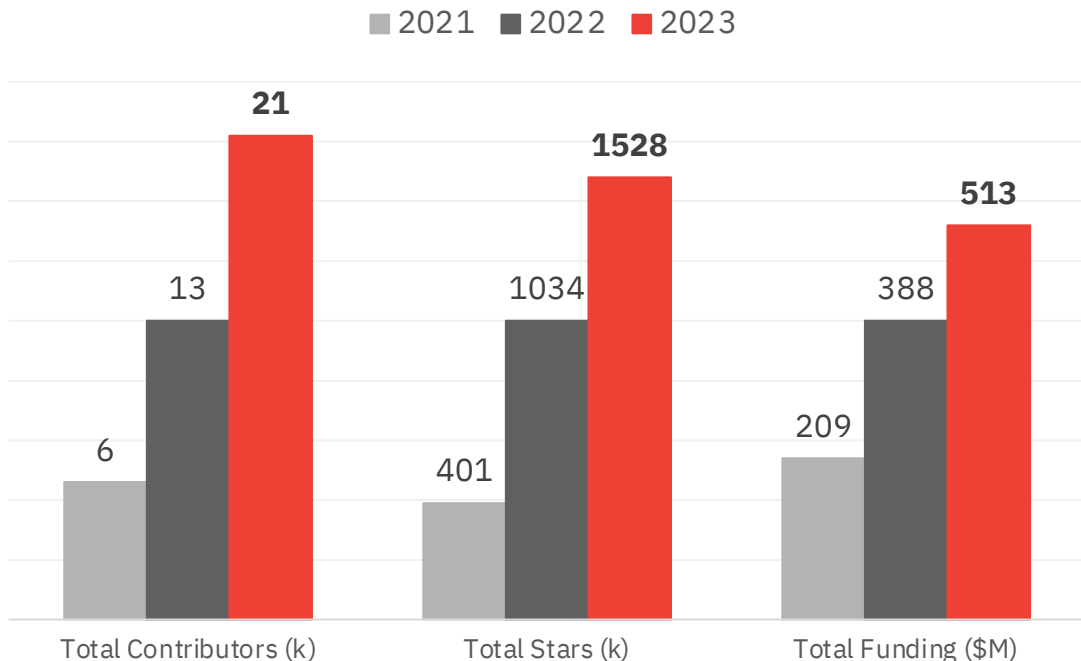


Other Languages: Vue, PHP, C++, Shell, Haskell, Zig



ROSS Index 2022: Growth in 2023

The 50 participants of the **Annual ROSS Index 2022** added **12K contributors**, **494K GitHub stars** and **\$125M VC funding** in 2023.



Notable events

Amazon acquires Fig, a startup building autocomplete for the command line

It might help boost Amazon's generative AI efforts

MindsDB Raises \$16.5M from Benchmark to put machine learning into more applications

February 7, 2023 Press release

ProjectDiscovery raises \$25M to launch a cloud version of its threat-scanning platform

Kyle Wiggers @kyle_l_wiggers / 5:00 PM GMT+1 • August 17, 2023



Penpot, the open source platform for designers and their coders, draws up \$12M as users jump to 250K

Ingrid Lunden @ingridlunden / 3:08 PM GMT+2 • February 2, 2023



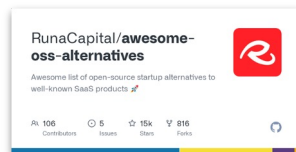


Join our community!

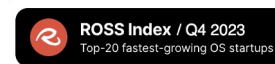
ROSS index is a live project that evolves with the active support of the tech community. All suggestions are welcome – please send them to oss@runacap.com



Subscribe to our newsletter to receive top-20 trending OSS startups every quarter



Give us a GitHub star or contribute to our repo listing known **awesome open-source alternatives**



Let your visitors know that you are one of trending open-source startups by adding our **ROSS badge**

 By the way, we are looking forward to your open-source startup: <https://runacap.com/contact>