Open-Source Development
Growing Business Use

Presenter: Elmer Camargo

Elmer Camargo

flapjackstan

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👥 **7** followers · **5** following

flapjackstan / README.md

✏️

Elmer Camargo - flapjackstan

I'm a data scientist at the LA County Department of Public Health helping maintain the COVID-19 Vaccine Dashboard and it's associated data pipeline - 👷 🧑‍💻

When I'm not working my dayjob I switch between studying for my Masters degrees (MS/MBA), lifting weights, and watching tv with my girlfriend and 3 dogs - 🧑‍🎓 🏋️ 🐕 🐖 🐕

Years from now I would like to teach/tutor middle school and highschool after school programs. Being part of Regional Occupational Program (ROP) in highschool really helped shape my future and would like to pay it back - 👦 🏫

Get in touch

- LinkedIn: https://www.linkedin.com/in/elmer-camargo-datasci/

Two Ideas!

What is open-source development?

Why are companies using it?

- Works at Netflix
- Has many community followers
- Seems to be really be into R

radiant-rstats

A browser-based interface for business analytics in R (with Shiny)

🔗 https://radiant-rstats.github.io/docs/   ✉ radiant@rady.ucsd.edu

Follow

🏠 Overview 📗 Repositories 17 🔲 Projects 📦 Packages 👤 People

Popular repositories

radiant   Public

Business analytics using R and Shiny. The radiant app combines the menus from radiant.data, radiant.design, radiant.basics, radiant.model, and radiant.multivariate.

🔵 R   ⭐ 376   ⑂ 118

docker   Public

Use R, Rstudio, Shiny, Radiant, Python, and Jupyter in a Docker container

🔴 HTML   ⭐ 84   ⑂ 33

radiant.data   Public

Code for the Data menu in Radiant

docs   Public

Radiant documentation

People

This organization has no public members. You must be a member to see who's a part of this organization.

Top languages

🔵 R   🔴 HTML   🟢 Shell

Support for upcoming glue 1.3.0 release #20

vnijs merged 1 commit into `radiant-rstats:master` from `jimhester:glue-1.3.0` on Jul 5, 2018

💬 Conversation 1	-○- Commits 1	☑ Checks 0	⊞ Files changed 3

+12 −6 🟩🟩🟩🟥⬜

jimhester commented on Jul 5, 2018 • edited ▾   Contributor ☺ ···

`glue::collapse()` has been renamed to `glue::glue_collapse()`, this provides support for both versions.

I plan to submit glue 1.3.0 to CRAN later this month.

-○- Support for upcoming glue 1.3.0 release ···   ✕ 68067e8

✓ **vnijs** approved these changes on Jul 5, 2018   View changes

vnijs left a comment   Contributor ☺ ···

Thanks **@jimhester**. Taking reverse dependency checks to the next level :)

Reviewers

👤 vnijs ✓

Assignees

No one assigned

Labels

None yet

Projects

None yet

Milestone

No milestone

∨ ⤢ 12 ■■■■□ R/aaa.R ⧉   ☐ Viewed ⋯

```
39                                                          39
40    #' Exporting collapse from glue as glue_collapse      40    #' Exporting collapse from glue as glue_collapse
41  - #' @details See \code{\link[glue]{collapse}} in the   41  + #' @details See \code{\link[glue]{glue_collapse}} in the
      \code{glue} package for more details                        \code{glue} package for more details
42    #' @name glue_collapse                                 42    #' @name glue_collapse
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44  - #' @param ... arguments passed to \code{glue::collapse} 44  + #' @param ... arguments passed to \code{glue::glue_collapse}
45    #' @export                                             45    #' @export
46  - glue_collapse <- function(...) glue::collapse(...)     46  + glue_collapse <- function(...) {
                                                             47  +   if (utils::packageVersion("glue") > "1.2.0") {
                                                             48  +     utils::getFromNamespace("glue_collapse", "glue")(...)
                                                             49  +   } else {
                                                             50  +     utils::getFromNamespace("collapse", "glue")(...)
                                                             51  +   }
                                                             52  + }
47    NULL                                                   53    NULL
48                                                           54
49    #' Exporting glue_data from glue                       55    #' Exporting glue_data from glue
```

⋮

∨ ⤢ 2 ■■□□□ R/explore.R ⧉   ☐ Viewed ⋯

What is open-source development?

Open-source software is software that is:

- *Decentralized*
- *Developed collaboratively*
- *Relies on peer review*
- *Enables community production*

(*[Redhat Linux](#)*)

Who is this relevant to?

The American National Red Cross
Washington D.C. · http://www.redcross.org · daniel.joseph@redcross.org

Overview · Repositories 150 · Projects · Packages · People 9

General Motors
We envision a future of zero crashes, zero emissions and zero congestion, and we have committed ourselves to leading the way toward this future.
Detroit, Michigan · https://www.gm.com · opensource@gm.com

Overview · Repositories 30 · Projects · Packages · People 1

The New York Times
New York, NY · https://nytimes.com · Verified

Overview · Repositories 92 · Projects · Packages · People 40

The Home Depot
Atlanta, GA · https://homedepot.com

Overview · Repositories 64 · Projects · Packages · People 9

Walmart Global Tech
Distributed · opensource@email.wal-mart.com

Overview · Repositories 151 · Packages · People 2

McDonald's

Overview · Repositories 3 · Projects · Packages · People

Zillow
United States · https://zillowgroup.com/

Overview · Repositories 135 · Projects 1 · Packages · People 7

Chevron Energy Technology Company

Overview · Repositories 22 · Projects · Packages · People 2

The Walt Disney Company
Los Angeles · http://github.com/disney

Overview · Repositories 17 · Projects · Packages · People 4

City of Los Angeles
Los Angeles, CA · https://lacity.org · Verified

Overview · Repositories 86 · Projects · Packages · People 3

Kaiser Permanente Washington Health Research Institute
Practical research for better health
Seattle, WA, USA · https://www.kpwashingtonresearch.or...

Overview · Repositories 42 · Projects · Packages · People

- 1,296 information technology department surveyed

- Across 6 different industries
  - Healthcare
  - Finance
  - Telecommunications
  - Retail
  - Government
  - Industrial

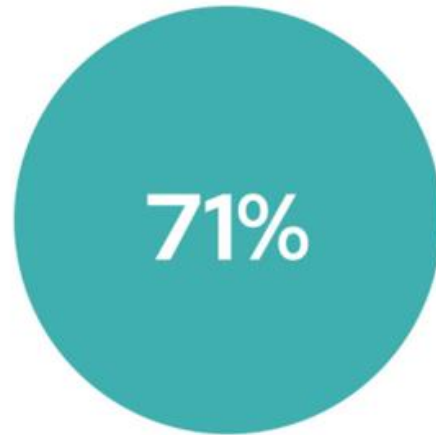- Across Asia, Europe, Latin American, Middle East, Africa, and the United States

Open-source is important to their organization's overall enterprise infrastructure.

Disagreed 5%

Agreed 95%
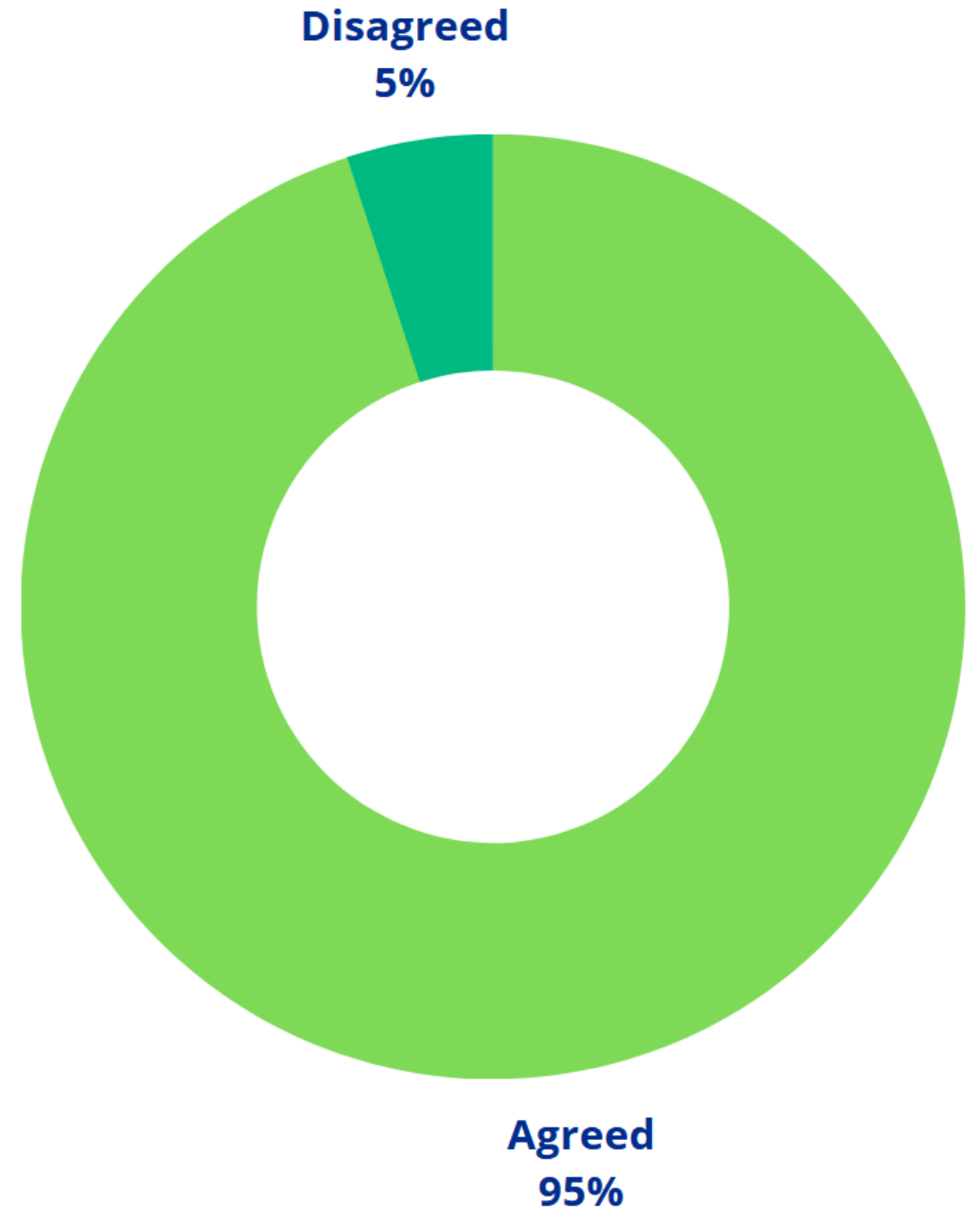
IT leaders are currently making good use of emerging technologies
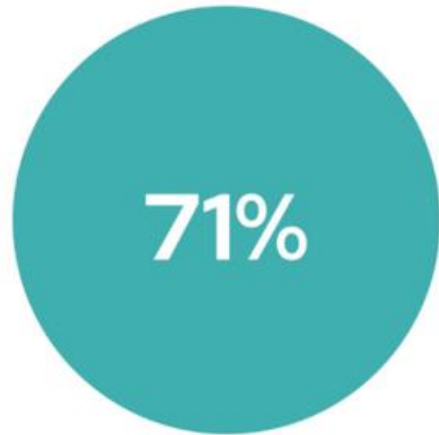
71%
Artificial intelligence (AI)
or machine learning (ML)

71%
Edge computing or
Internet of Things (IoT)

68%
Containers

61%
Serverless computing

80% of IT leaders expect to increase their use of enterprise open source software for emerging technologies.

80%

of IT leaders expect to increase their use of enterprise open source software for emerging technologies.

Companies are using open-source tech because it drives it provides a foundation for innovation

Why Does A Business Open-Source?
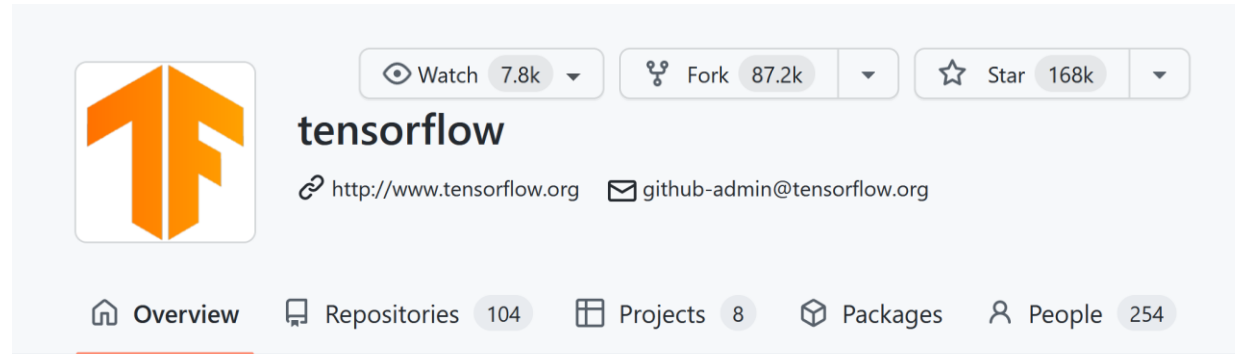
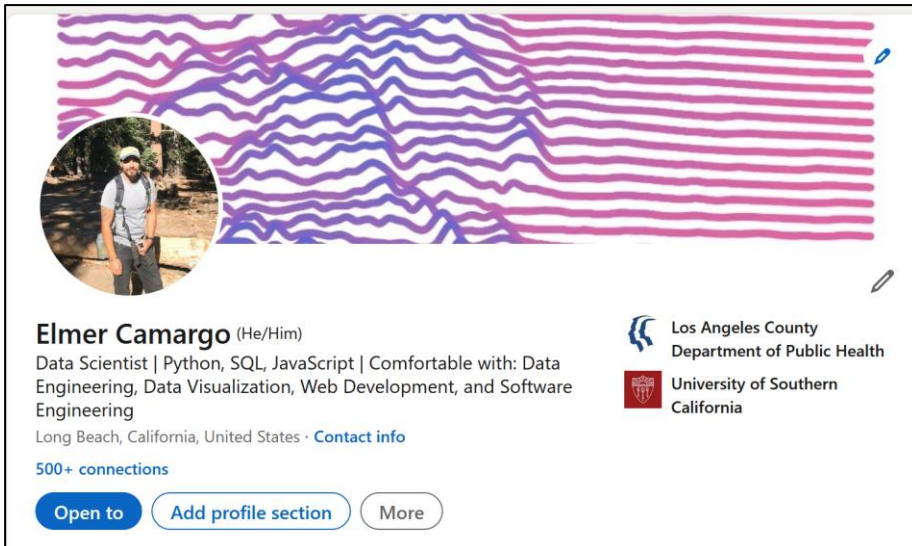*Google's open-sourced prediction tool*

Spend less on a specialized skill

It doesn't takeaway from core business

All parties benefit

Contributors 3,200

+ 3,189 contributors
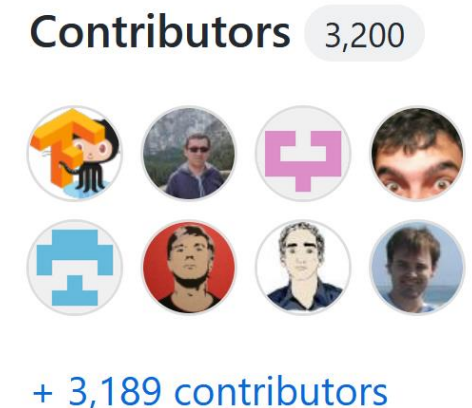
Recommendations

- Whatever your industry, investigate the software that drives it
  - Talk to your software or IT team
- Read about open-source business models
  - Or ask me about it later

[LinkedIn](#)

[Email](#)

[Github](#)

References + Additional Resources

- [REL Open-Source Report](#)

- [Rise of Open-Source – YouTube](#)

- [How Open-Source Makes Money – YouTube](#)

- [Disadvantages of Open-Source](#)

- [Somewhat Recent Open-Source Company IPO's](#)

- [30 Companies That Engage in Open-Source Development](#)

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Recap!

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2 ▮▮□□□ R/explore.R

☐ Viewed

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vnijs left a comment   Contributor ☺ •••

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Reviewers

👤 vnijs   ✓

Assignees

No one assigned

Labels

None yet

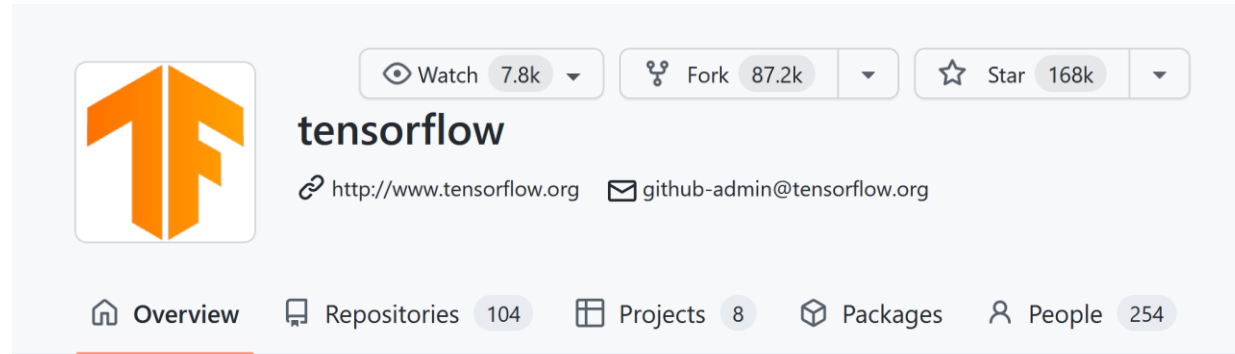## Projects

None yet

Milestone

No milestone

Recap!

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Why are companies using it?

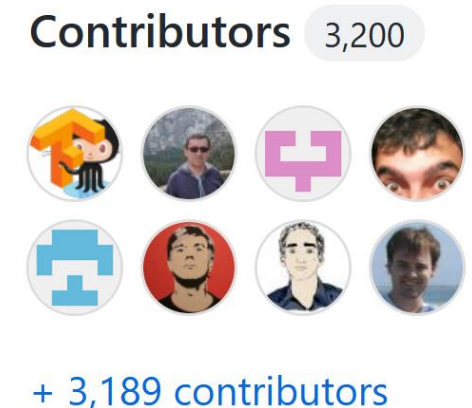# Why Does A Business Open-Source?
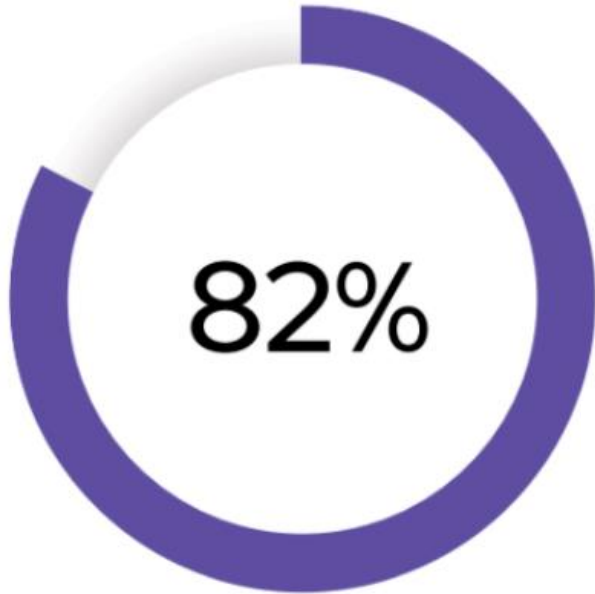

Google's open-sourced prediction tool

Spend less on a specialized skill

It doesn't takeaway from core business

All parties benefit

Why apply it?

82% of IT leaders are more likely to select a vendor who contributes to the open source community.

Applying it!

What changes?

Airbnb Engineering & Data Science

Creative engineers and data scientists building a world where you can belong anywhere
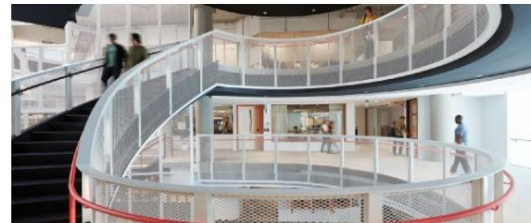
Blog Posts

On Spark, Hive, and Small Files: An In-Depth Look at Spark Partitioning Strategies

Enzyme's Next Phase

Building an Effective Test Pipeline in a Service Orien...

Better Android Testing at Airbnb

Better Android Testing at Airbnb

Better Android Testing at Airbnb

Better Android Testing at Airbnb

Dynein: Building a Distributed Delayed Job Queuein...

Better Android Testing at Airbnb

Open Source Projects

Airflow Use Apache Airflow (incubating) to author workflows as directed acyclic graphs (DAGs) of tasks
⭐ 21,759

Aerosolve A machine learning package built for humans
⭐ 4,707

Airpal Web UI for PrestoDB
⭐ 2,759

BinaryAlert Serverless real-time and retroactive malware detection
⭐ 1,149

DeepLinkDispatch Easy declaration and routing of your deep links
⭐ 4,003

Hammerspace Hash-like interface to persistent, concurrent, off-heap storage
⭐ 331

AirMapView A view abstraction to provide a map user interface with various underlying map providers
⭐ 1,806

Enzyme JavaScript Testing utilities for React
⭐ 19,571

Epoxy for iOS Epoxy is a suite of declarative UI APIs for building iOS UIKit apps in Swift
⭐ 574

logo
Epoxy for Android An Android library for building complex screens in a RecyclerView
⭐ 7,339

HorizonCalendar A declarative and performant iOS calendar UI component that supports use cases ranging from simple date pickers all the way up to fully-featured calendar apps.
⭐ 1,895

JavaScript Style Guide A mostly reasonable approach to JavaScript
⭐ 109,979

Interferon Signaling you about infrastructure or application issues
⭐ 227

Hypernova A service for server-side rendering your JavaScript views
⭐ 5,716

The Knowledge Repo A next-generation curated knowledge sharing platform for data scientists and other technical professions
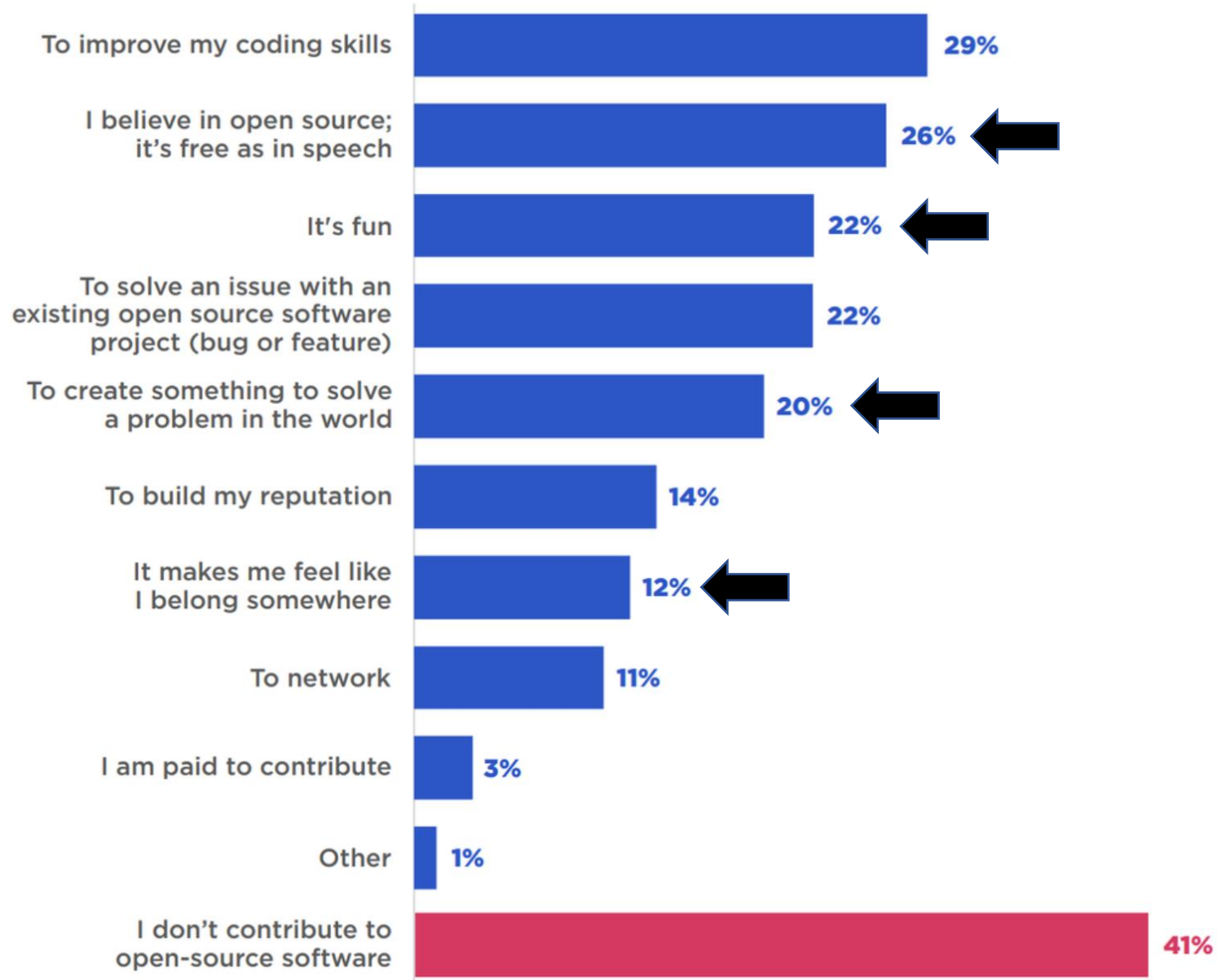⭐ 4,790

Lottie (Android) Render After Effects animations natively on Android
⭐ 31,260

Applying it!

What changes?

What's in it for the employees?

Percent of developers reasons why they contribute to open-source

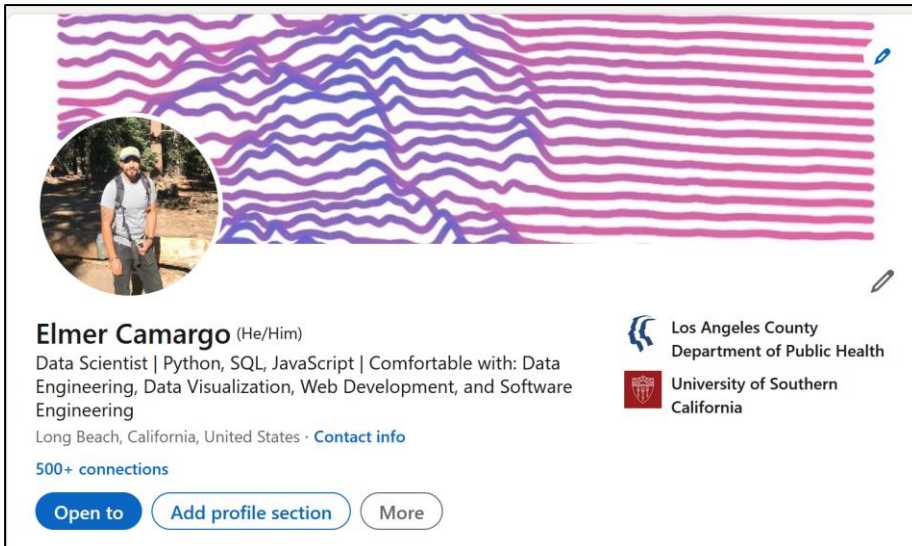| Reason	Percent
To improve my coding skills	29%
I believe in open source; it's free as in speech	26% ←
It's fun	22% ←
To solve an issue with an existing open source software project (bug or feature)	22%
To create something to solve a problem in the world	20% ←
To build my reputation	14%
It makes me feel like I belong somewhere	12% ←
To network	11%
I am paid to contribute	3%
Other	1%
I don't contribute to open-source software	41%

N = 16,420

Source: Tech Republic

- Its fun

- I believe in open-source; its free as in speech

- To create something to solve a problem in the world

- It makes me feel like I belong somewhere

Work Satisfaction

Recommendations

- Consider some small steps towards open-source contribution
  - Blogs
  - Conference talks
  - Or ... dive right in and put a tool on open-source

LinkedIn

Email

Github

References + Additional Resources

- [Airbnb Engineering and Data Science Blog](#)

- [Why Developers Like Contributing To Open-Source](#)