

Understanding developer advocacy *in Wikipedia's technology landscape*

Presented by Srishti Sethi



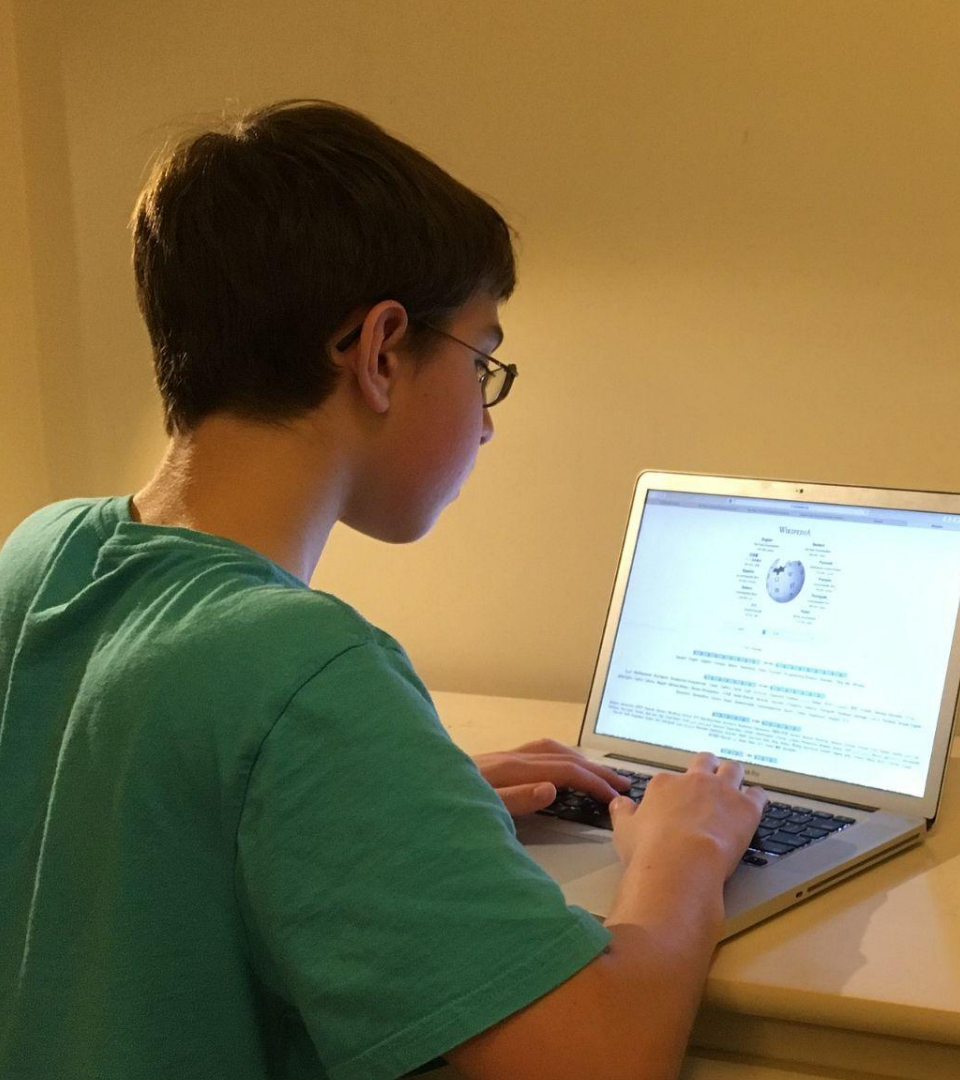
What *is developer
advocacy?*



Developer Advocacy

User → Contributor → Maintainer





Contribution *vs. Adoption*

Goal: Better Software for
Wikimedia

```
<?php
```

```
$is_contributor_happy = true;
```

```
$is_contributor_lost = false;
```

```
$contributor = array();
```

```
if ( $is_contributor_happy ) {
```

```
    array_push( $contributor, "significant contributions", "sense of  
    belonging", "identity", "long term contributor" );
```

```
    echo "Contributor is happy 😊 ";
```

```
}
```

```
if ( $is_contributor_lost ) {
```

```
    $i = 0;
```

```
    while ( $i < count( $contributor ) ) {
```

```
        array_pop( $contributor );
```

```
        $i++;
```

```
        echo "Oops! Contributor is lost 😞 ";
```

```
    }
```

```
?>
```

Community vs. Marketing

Good ROI: Happy
Contributor 😊

Why *developer
advocacy?*

Wikipedia *and family*

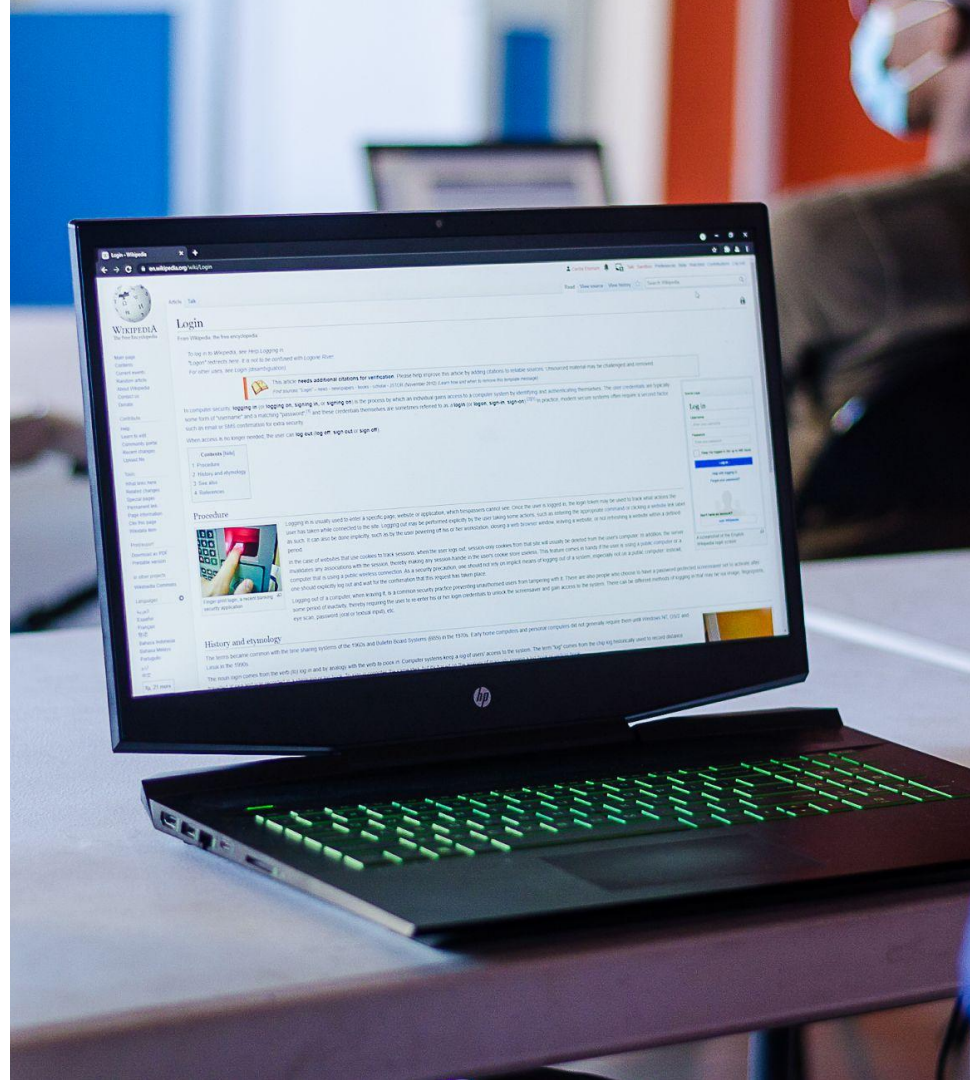


Over **870 Wikipedia and umbrella sites** available in other languages.

Mediawiki, *the software behind Wikipedia*

A **free and open source** collaboration and documentation software used by thousands of orgs and individuals. Many extensions are available:

- ➔ VisualEditor (a WYSIWYG editor)
- ➔ Wikibase (structured content)



Wikipedia's technology ecosystem *is vast*

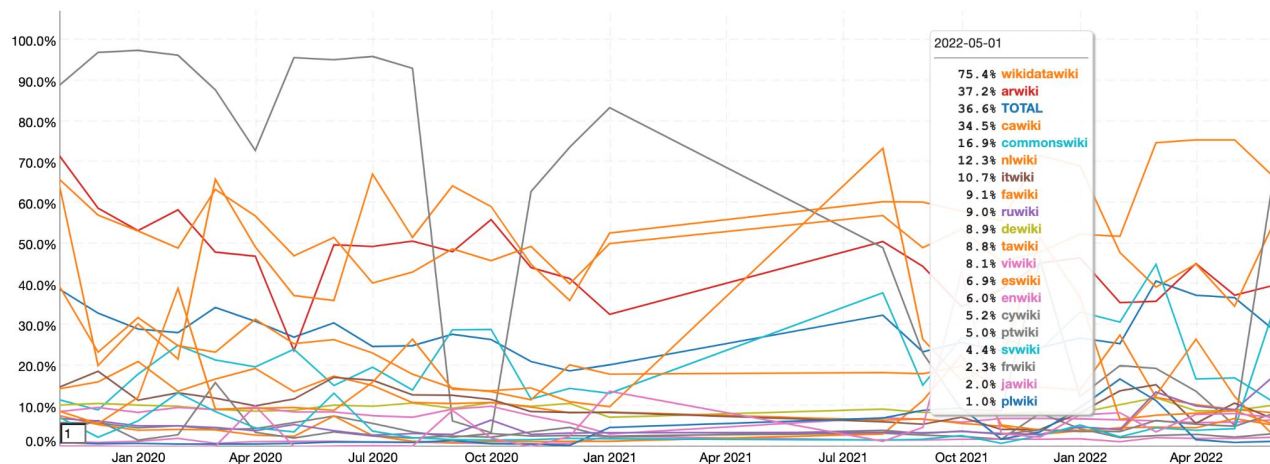
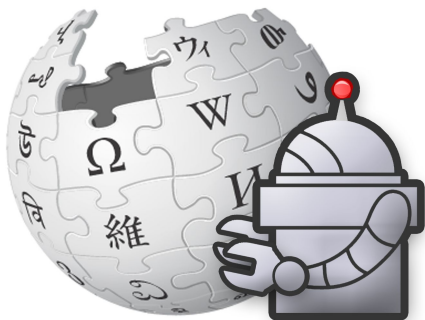
Even NASA uses the software behind Wikipedia - **MediaWiki** for organizing content around their space missions!

400,000+ MediaWiki uses exist



Community bots & tools

1/3rd of edits made to over 800 Wikimedia wikis contributed by bots and tools using our cloud infra

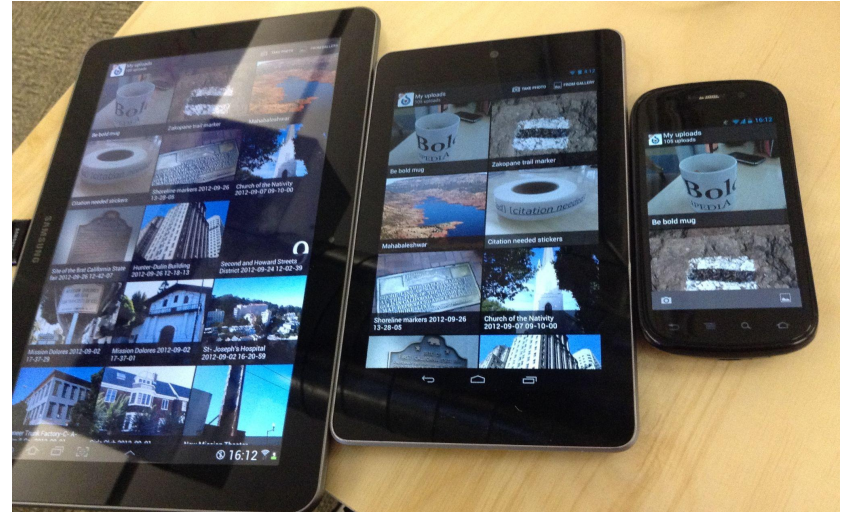


Desktop & mobile apps



Kiwix - Wikipedia offline reader in schools

Provides access to Wikipedia in limited internet access regions, particularly in educational settings.



Android app for Wikimedia Commons

Allows editors to contribute audio, video, media files from their smartphone devices.

2004: *One lead developer*



2023: >700 people,
remote-first, global org

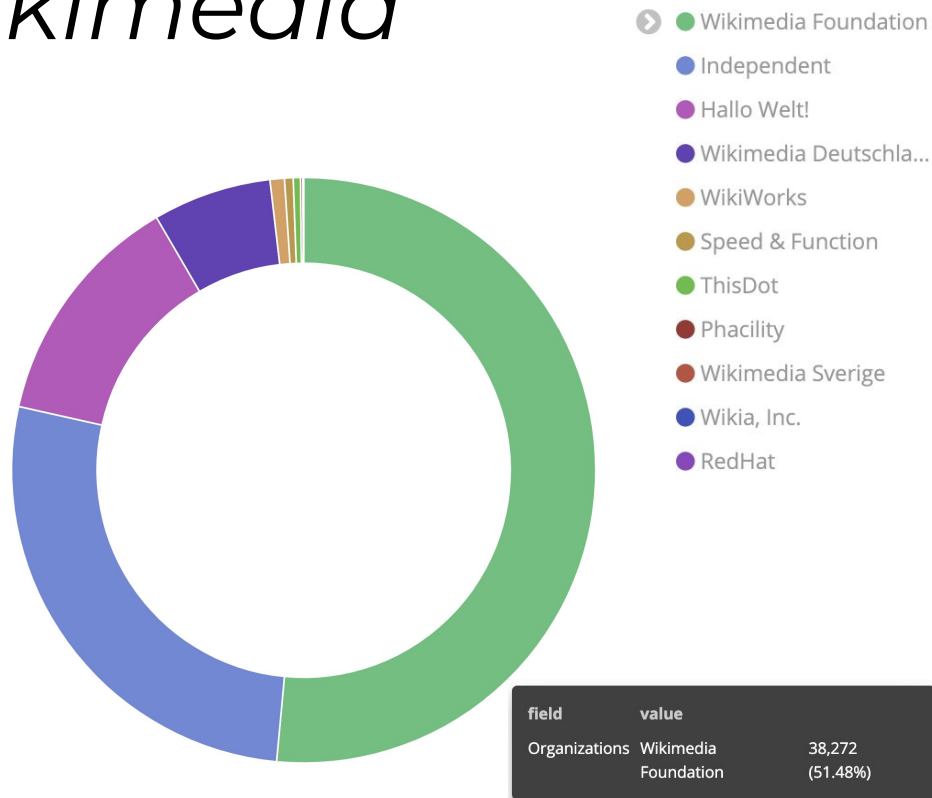
Wikimedia's *technical* *community*



48.52% code contributions *from outside of the Wikimedia Foundation*

Received by independent volunteers and other organizations (July 21–June 22)

- **514** contributors
- **1,225** repositories
- **45,621** commits



How *developer advocacy*
operates?

Day in the life of a Developer Advocate at Wikimedia



Is there anything remaining in this task before it can be marked as resolved?



Would you be interested in mentoring this project via the upcoming round of GSoC / Outreachy?




Could you please review & leave your feedback on this patch at your earliest? It really needs your attention.



Technical workshops are coming up! Interested in participating? Please sign-up on this wiki page.

Developer Advocacy and *its role in Wikimedia*

A flock of birds, possibly cranes or herons, is silhouetted against a warm, golden sunset sky. The birds are scattered across a field, with some standing and others in flight. Two speech bubbles are overlaid on the scene. The first speech bubble, on the left, contains the text "I need help with my patch!!". The second speech bubble, on the right, contains the text "No worries, I'll get someone to help you!".

***I need help
with my
patch!!***

***No worries, I'll
get someone to
help you!***



Srishti Sethi

@Srish_Aka_Tux



I'm reading an [@Outreachy](#) intern's bi-weekly report. She is a mother of two, highlights her struggles of raising kids as an immigrant in the US, and writes about the front-end development skills she picked up while working on the internship project:

lalitha711.home.blog

In Search Of Next Opportunity

It is almost the end of my first Outreachy internship and I am looking for another internship or apprenticeship ...

3:44 PM · Feb 25, 2020

1. Outreach and mentoring programs



Google Summer of Code

OUTREACHY

2. Grants enabling cultural heritage

*“An 85 years old man had the opportunity to share an old **Alsatian poem** through the Lingua Libre project. This man, had the opportunity to express himself with his own language in a public place. For many years, speaking Alsatian or other mother languages was repressed. This man felt pride to share but also that someone in Japan could listen to him speak in his mother tongue.”*

~ LinguaLibre developer



Lingua Libre



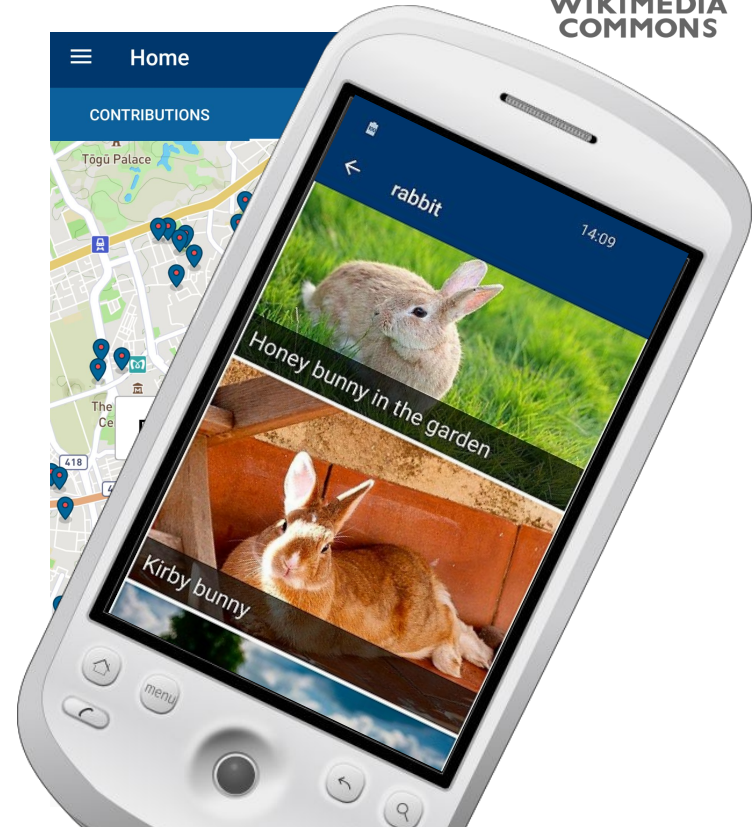
2. Grants

unlocking free knowledge

Files uploaded via the Commons Android app are in use at **100,000+ places** on Wikipedia.



WIKIMEDIA
COMMONS



3. Hackathons & events



Villupuram-based software company gets Silicon Valley call

The Wikimedia grant will help these youngsters set higher targets in life and through them, this 'most backward' district stands to gain a great deal.



Published: 05th June 2022 04:27 AM | Last Updated: 05th June 2022 04:27 AM

🗻 | A+ A A-

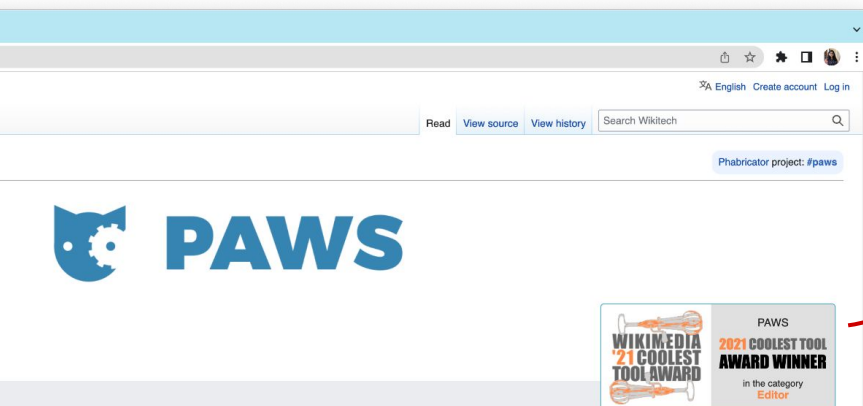


Volunteers of the Villupuram GNU/Linux Users Group (V-GLUG). (Photo | EPS)

By Krithika Srinivasan

Express News Service

5. Community recognition



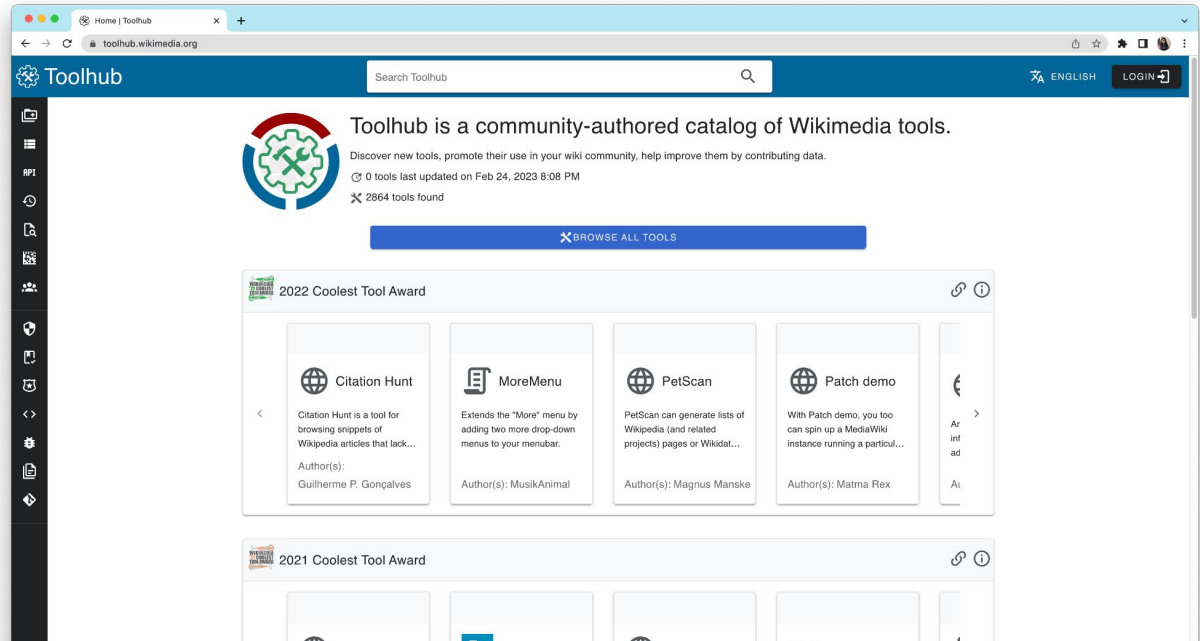
Cloud VPS & Toolforge
Cloud VPS portal
Toolforge portal
Request VPS project
Admin log: Cloud VPS

Tools
What links here
Related changes

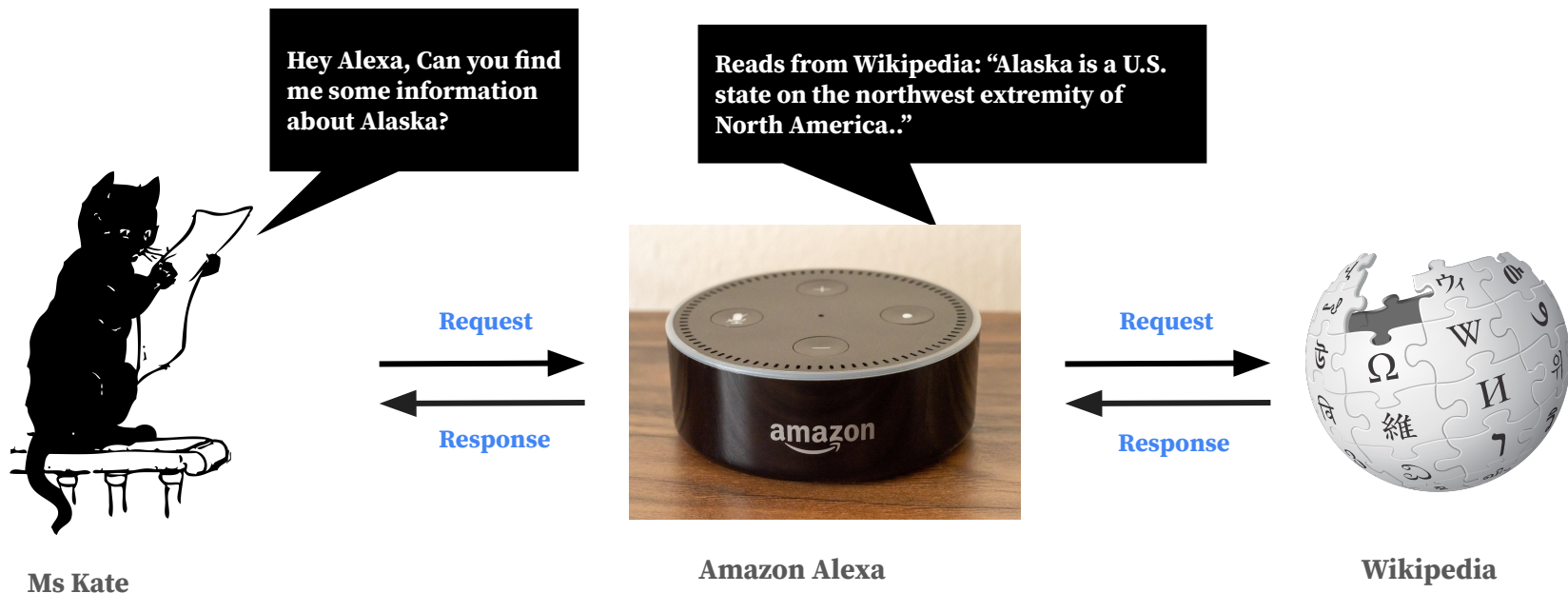
PAWS: A Web Shell (PAWS) is a Jupyter notebook deployment hosted by Wikimedia.

6. Technical support *for* Wikimedia cloud services

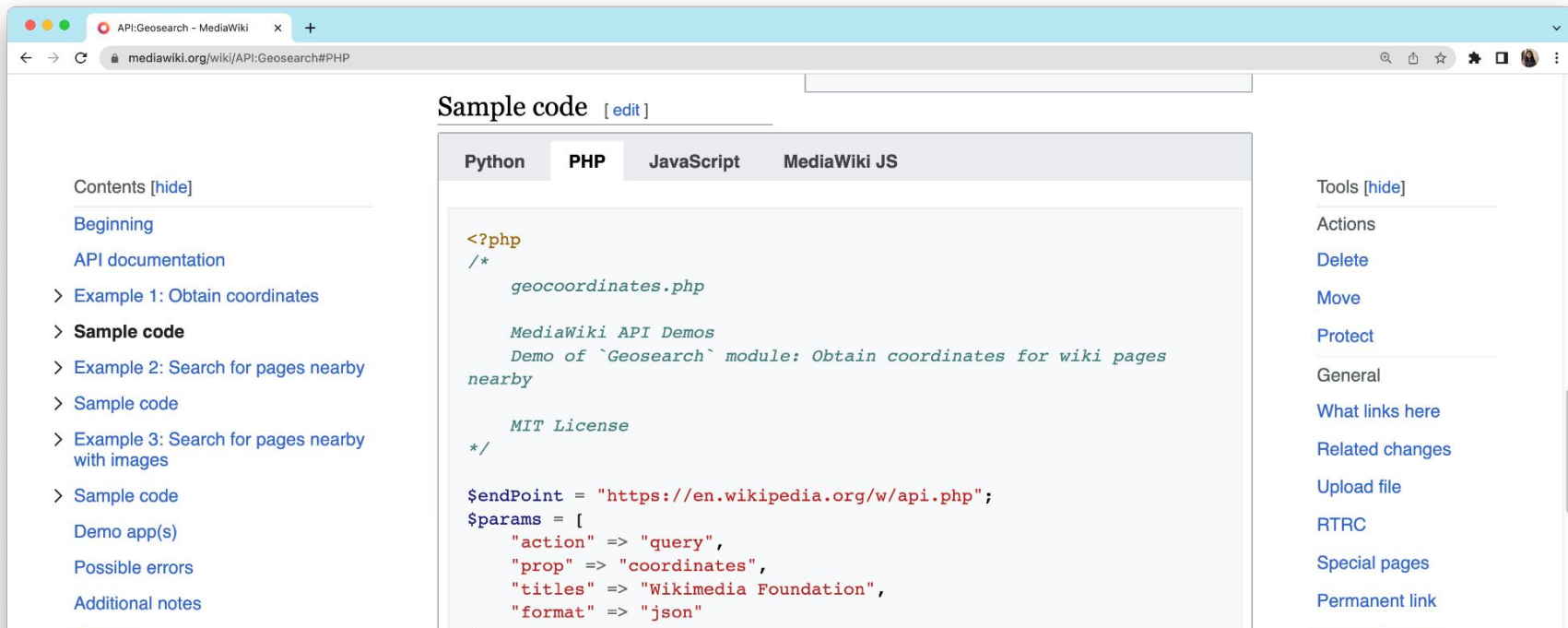
Thousands of tools leverage Wikimedia's cloud services infrastructure built upon Openstack, GridEngine, Kubernetes to host, run and maintain their tools.



6. Technical support for *Wikimedia APIs*



6. Technical support *for* Wikimedia APIs



API:Geosearch - MediaWiki x +

mediawiki.org/wiki/API:Geosearch#PHP

Sample code [\[edit\]](#)

Python **PHP** JavaScript MediaWiki JS

```
<?php
/*
    geocoordinates.php

    MediaWiki API Demos
    Demo of `Geosearch` module: Obtain coordinates for wiki pages
    nearby

    MIT License
*/

$endPoint = "https://en.wikipedia.org/w/api.php";
$params = [
    "action" => "query",
    "prop" => "coordinates",
    "titles" => "Wikimedia Foundation",
    "format" => "json"
```

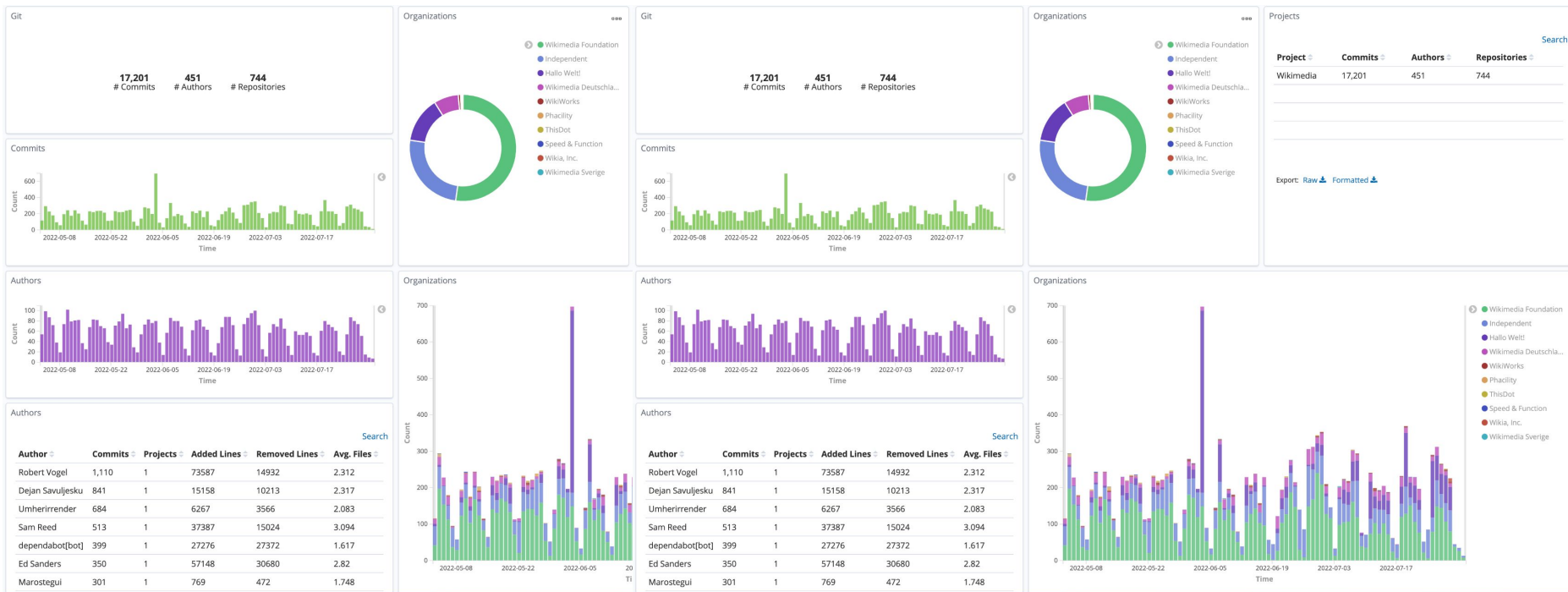
Contents [\[hide\]](#)

- Beginning
- API documentation
 - Example 1: Obtain coordinates
 - Sample code**
 - Example 2: Search for pages nearby
 - Sample code
 - Example 3: Search for pages nearby with images
 - Sample code
- Demo app(s)
- Possible errors
- Additional notes

Tools [\[hide\]](#)

- Actions
 - Delete
 - Move
 - Protect
- General
 - What links here
 - Related changes
 - Upload file
 - RTRC
 - Special pages
 - Permanent link

7. Community metrics and health



[Wikitech-l] Patchsets by new Gerrit contributors waiting for code review and/or merge

Wikilist x



Thu, Jun 20, 2019, 12:09 AM



to wikitech-l

Summary of repos with more than one patch waiting:

5x WikiPEG. 4x Parsoid. 3x UnblockMe. 2x Cargo. 2x PageForms. 2x MW Core.

CR0: Please review and provide guidance if you are familiar with the code, and decide (CR±1 or CR±2):

* <https://gerrit.wikimedia.org/r/#/c/mediawiki/extensions/Cargo/+480039/>

** Added new feature: order virtual fields by the order they inserted to list on cargo store

** 2018-December-17

** Maintainers/Stewards: ???

Summary

1. Focusing on new contributors through **outreach & mentoring programs**
2. Sustaining impactful projects with limited resources through **grants**
3. Bringing the community together through **hackathons & events**
4. Building **technical capacity** to improve equity in communities
5. Cultivating a culture of celebration through **community awards**
6. Providing **technical support** in various areas (cloud services, APIs)
7. Assessing **community metrics & health** to take informed decisions

Key questions

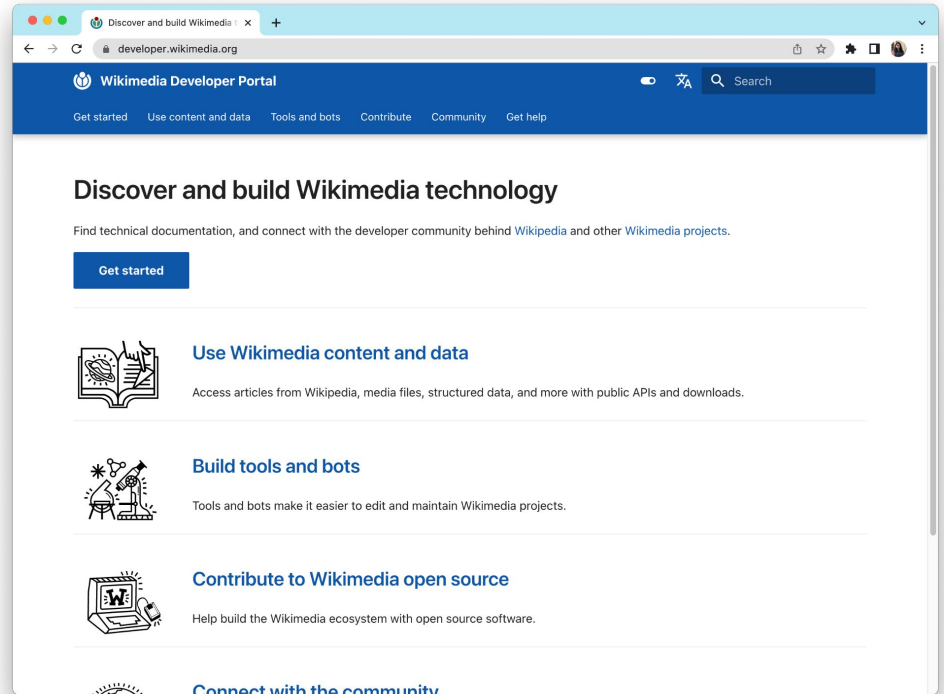
- How do you **assess impact** of community engagement & outreach initiatives?
- How do you develop technical support initiatives that are **scalable & sustainable** for a multilingual, global community?
- How do you design for turning “casual” into “**long-term**” **contributions**?



Developer Resources

Interested in contributing to
Wikimedia projects?

<https://developer.wikimedia.org>



Thank you for listening!

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