

Welcome to Rokwire Community



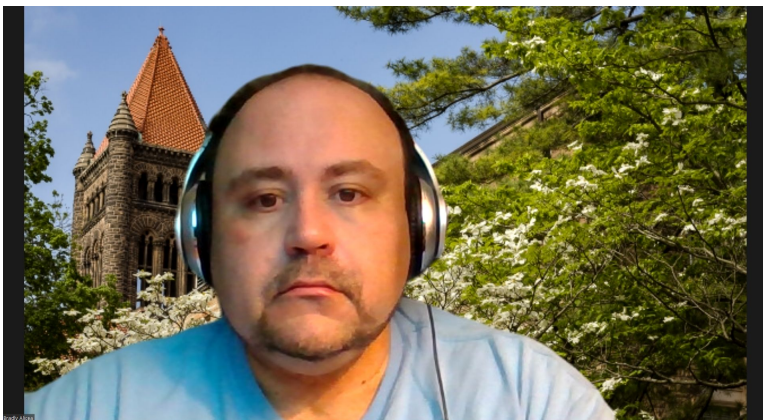
Join us on Slack and Discord!



<http://rokwirecommunity.web.illinois.edu>

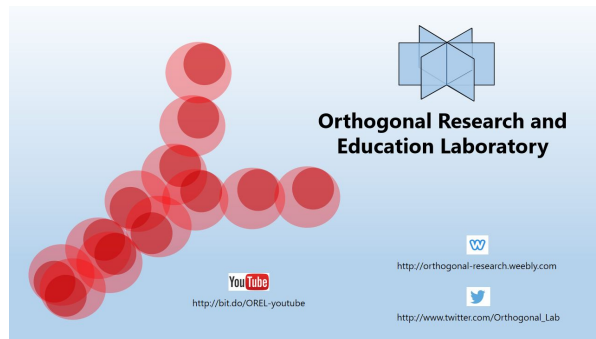


<http://www.github.com/rokwire/rokwire-community>



Bradly Alicea

Community Manager



About Me

PhD from Michigan State University, Postdoc at UIUC

- extensive experience with interdisciplinary research and education.

OpenWorm/DevoWorm Curriculum



Open Leaders 7 (April, 2019)



Bradly Alicea

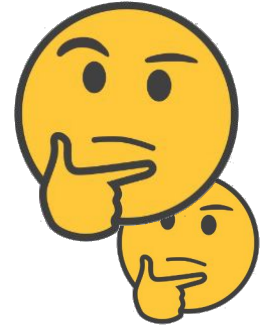
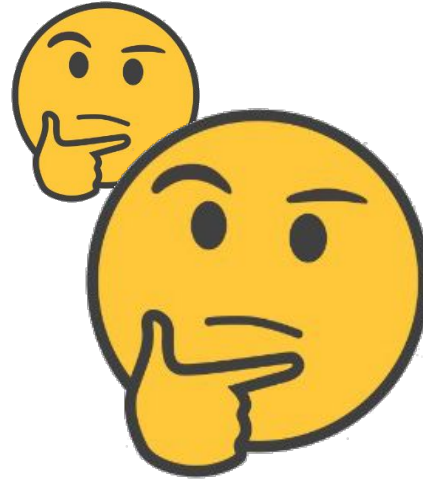
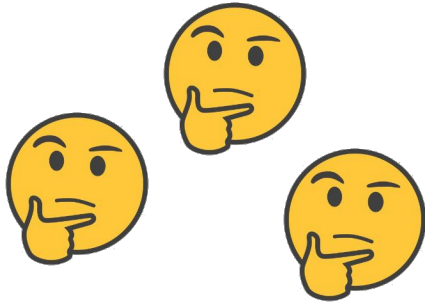
<http://bradly-alicea.weebly.com>



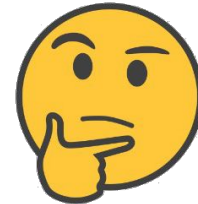
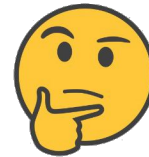
Open Source experience with the OpenWorm Foundation, Orthogonal Research and Education Lab, eLife Ambassadors, eLife Innovation Leaders, ASAPBio, and Mozilla Open Leaders.

- community building and project management.

Interest in open-source research, publication, and education/outreach.



**Why do we have a
Community?**



Why do we “Work Open”?

Open source denotes software for which the original source code is made *freely available* and may be *redistributed and modified*.

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Requires a shift in perspective

Why should I contribute?

Professional advancement

- Be part of an organization (put work in portfolio, on CV).
- Build up expertise and network with same, other specialties.

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Collective Maintenance

- make an initial contribution, others will collectively edit and update (pooled expertise).

Developing an “ethos” of open-source:

Productivity, copying and sharing (forking), idea genealogy (program history), and the social implications (capital and contracts).



Owners

12

rokwire

feature/issue-386

develop

release/v2.9.1+901

karacw

develop

fill+ortiz/yes-es

ChuranHe

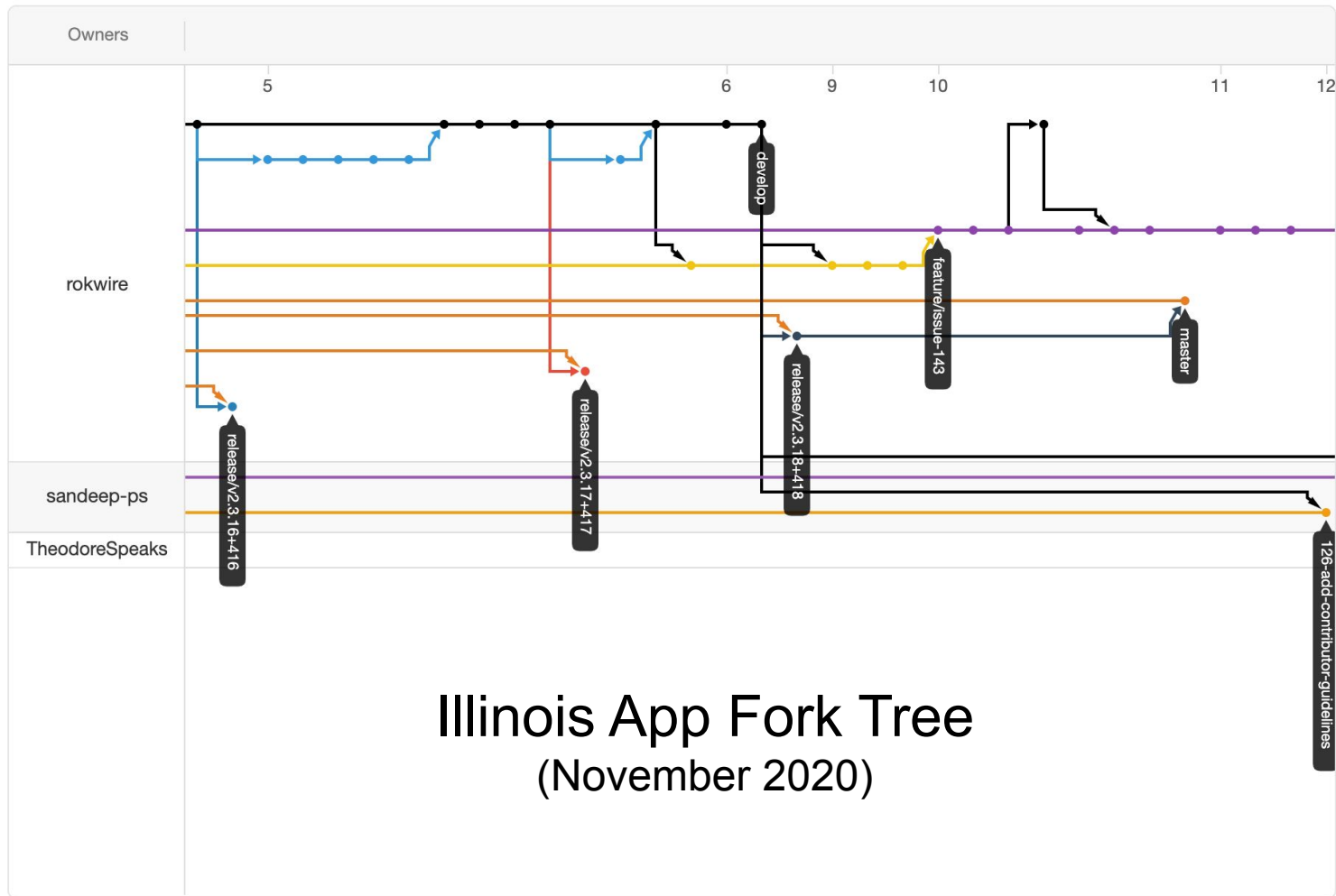
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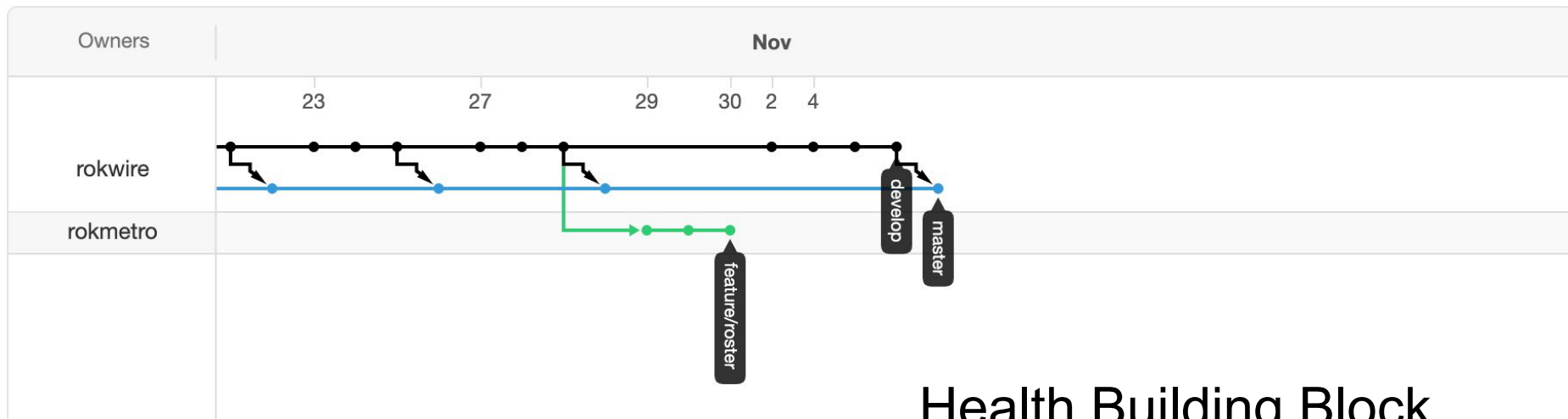
lijianw2

Safer Illinois Fork Tree (November 2020)



Illinois App Fork Tree

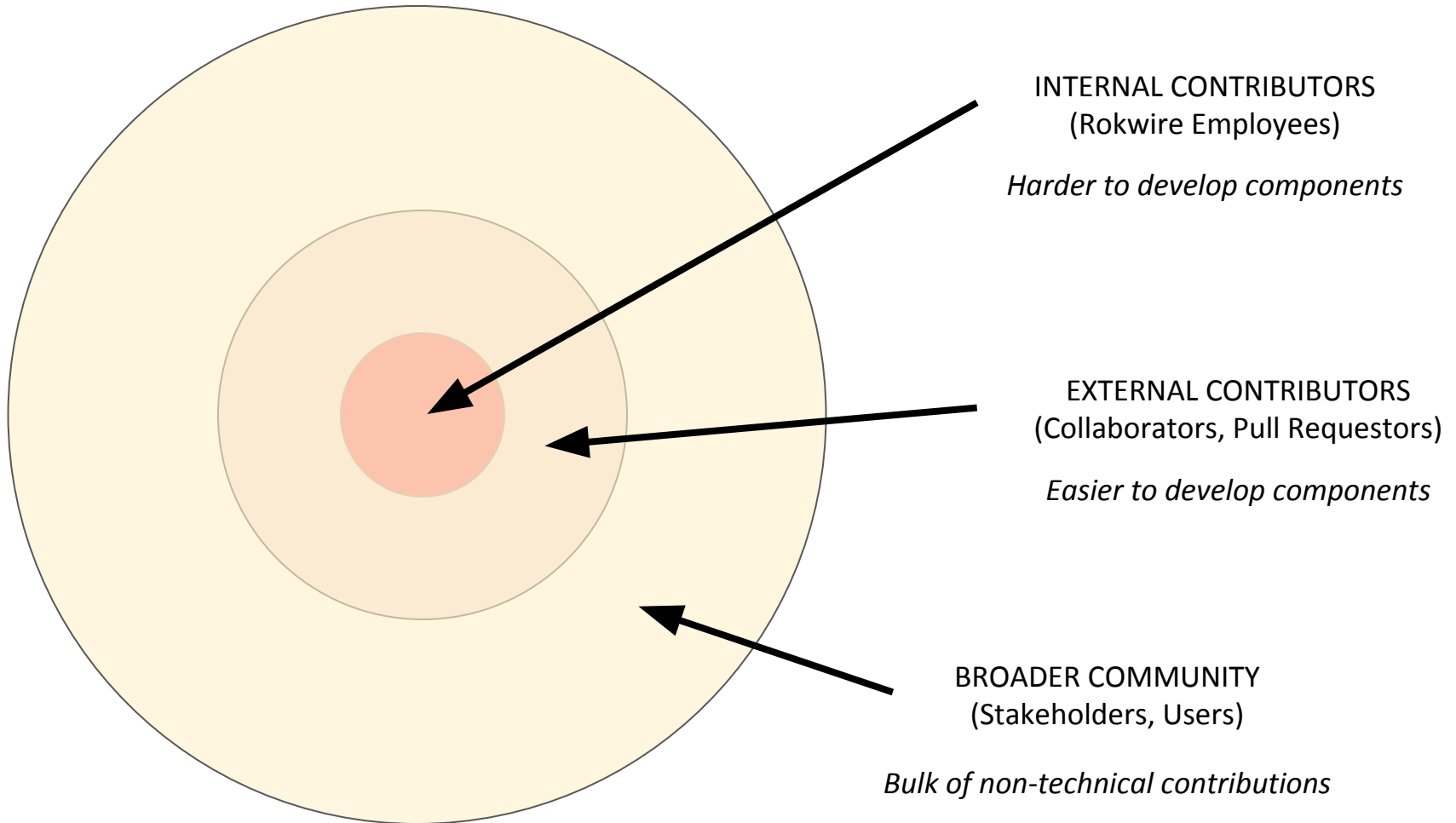
(November 2020)



Health Building Block Fork Tree (November 2020)

Long-term Vision for Community





Sources of Contributors

Potential Number of Contributors



Public Inquiries (website form,
social media)

Classes, departments, and
interest groups on campus

New Rokwire
employees

Interactors (community calls,
chats, virtual environments)

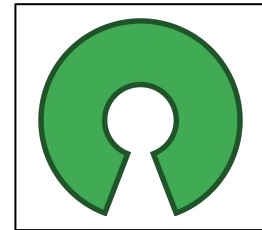
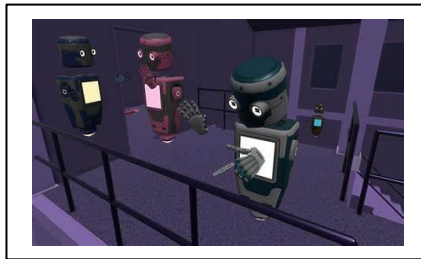
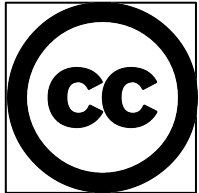
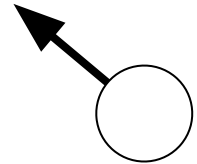
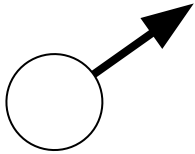
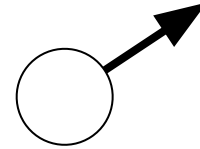
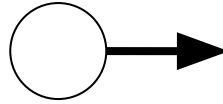
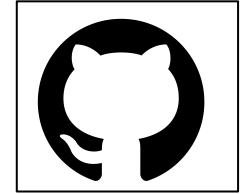
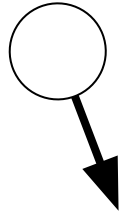
Promotional tie-ins (pandemic
response, smart communities, open
houses)



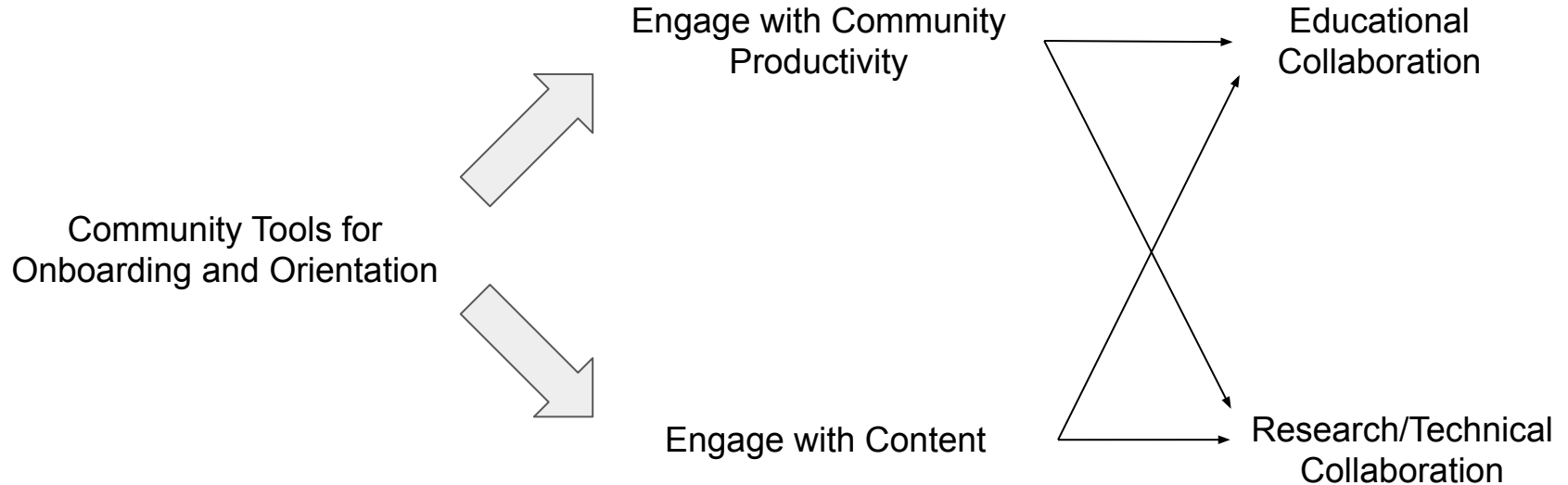
Potential Magnitude of Contribution

Interaction Infrastructure

Routes to open-source education, engagement, and technology adoption



From Onboarding to Engagement



Aurora, IL: engaging the broader community



Build an app around the needs of a large, diverse community.

Manage constituent services (live streaming, combining existing apps into a more efficient service).



Communication across community: awareness of local events and resources, connect entrepreneurs.

Responding to emerging trends and latent needs in the community.



Alchemy and Rokwire

Join forces with Rokwire Community (<https://rokwirecommunity.web.illinois.edu/>) and Alchemy (<https://ece.illinois.edu/alchemy>) to develop a Smart Cities Digital Application for the City of Aurora, Illinois! Rokwire is an open-source cloud initiative founded at the University of Illinois to help create smart campuses, communities, and cities. Rokwire is the framework upon which the Illinois and the Safer Illinois Apps were developed.

On this project, you'll work with a small multi-disciplinary team of students focusing on technology, design, social factors, community needs to empower the residents of Aurora, IL with digital services to create a smarter, safer, healthier community. This project will start in Spring Semester 2021 and culminates with launch in Aurora in Spring 2022. We'll use the latest in cloud privacy and security, sensors, IoT, and AI technologies. Our desires are to make a strong positive impact on people's lives in Aurora.

We are looking for students with a strong background in Golang, Dart, and Python, UX/UI design, mobile/cloud technologies, and civic/social systems. You will learn about how to work on a collaborative team to develop building blocks using the Rokwire platform, which will enable many aspect of the smart city.



Deadline to apply is December 10. Please submit an application, including a short paragraph describing your interest and suitability. Course credit is possible. Contact balicea@illinois.edu for questions or additional information.



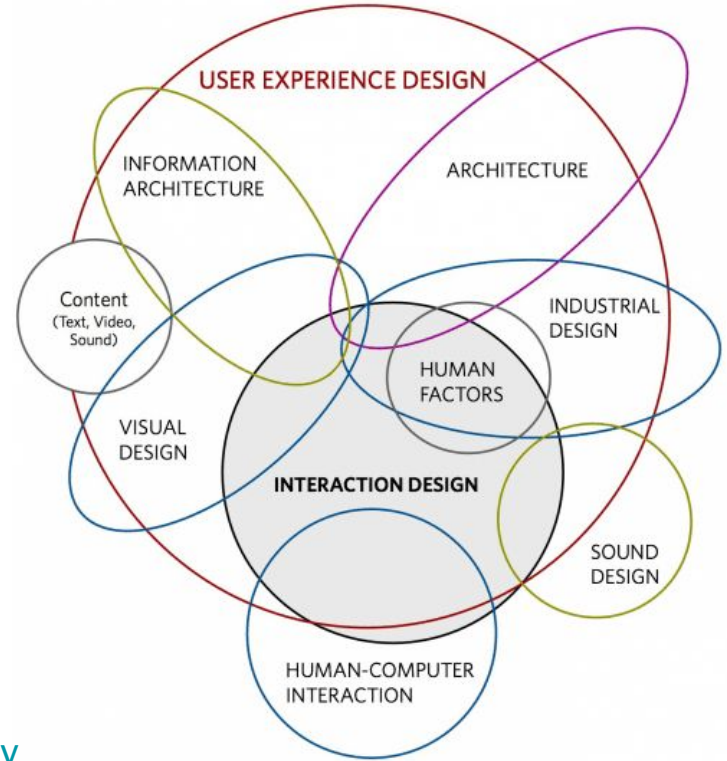
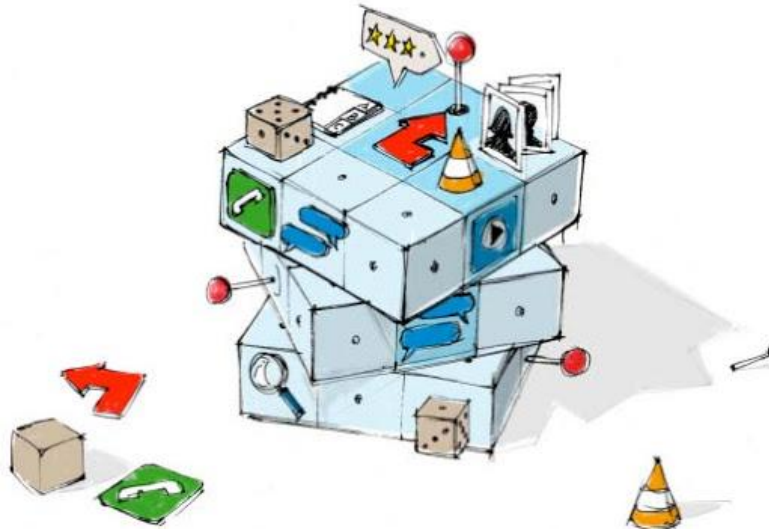
<https://qrqo.page.link/Y2Ab9>

Interactions with education opportunities (Alchemy Foundry) campus units (ECE, Siebel Center for Design) and communities (Aurora, IL).

Advertise specific events, onboard interested participants.

- once they are engaged in the community, serves as a entry point into other activities.
- attract a wide range of contributors (coders, design-oriented people, no particular area).
- casual interactions can lead to more intense engagement.

User Interaction Design



#hci in the Rokwire Community



Slack: <https://launchpass.com/rokwirecommunity/>



Discord: <https://launchpass.com/rokwire-community>

The Grainger College of Engineering
Computer Science

CS + X DEGREE PROGRAMS



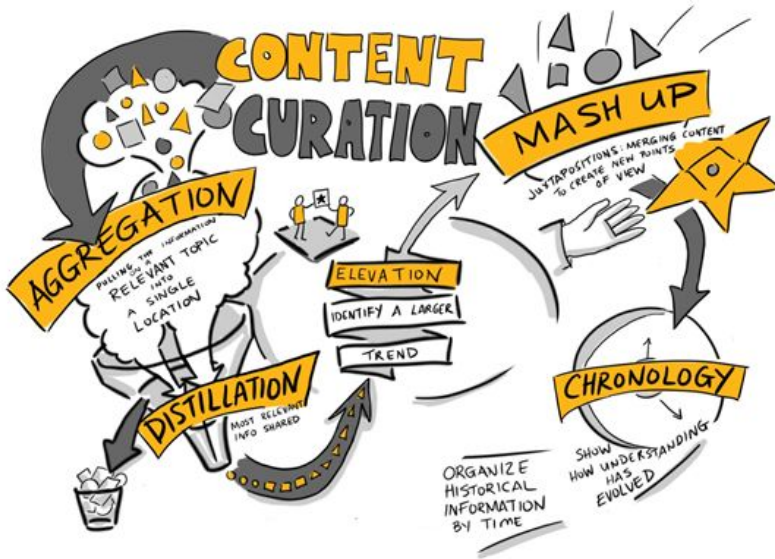
- exciting opportunities in CSx.
- find new opportunities for collaboration, creation.



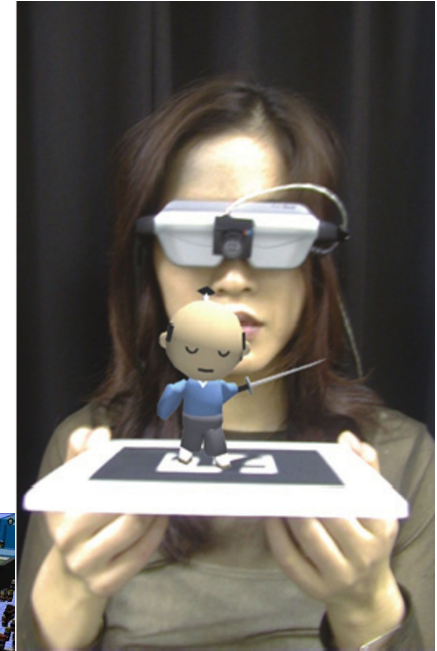
Visualization of GA application to clustering related studies

Multi-tech Applications

CLOCKWISE FROM TOP: Augmented Reality (layers of context-awareness), Crowd (Agent-based) Simulations, Social Media Content Curation (finding relevant content).



Based on R. Bhargava and Welenia Studies licensed under a creative commons CC BY



Future Student Interaction

iSchool interns: develop a virtual reality infrastructure (meeting spaces, modeling and simulation).

Alchemy Foundry: various projects (Aurora App, etc).

Google Summer of Code: data science project, tools for customized development.

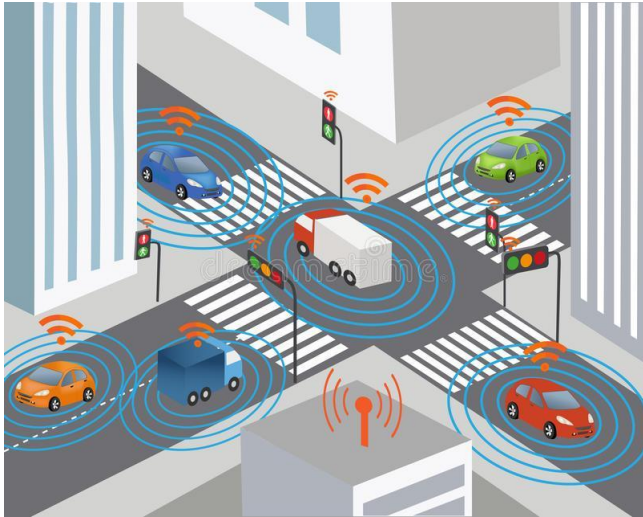
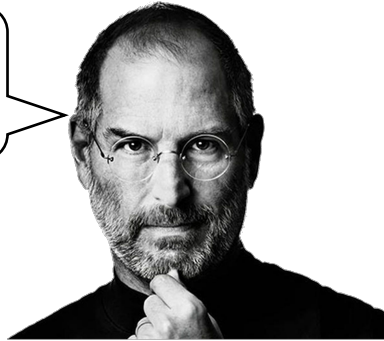
K-12 students: Rokwire for education, apps for managing remote learning.

Encouraging Broad Thinking about Sociotechnical Problems

Contributors think about smart cities education and potential user-centered applications in the context of Rokwire

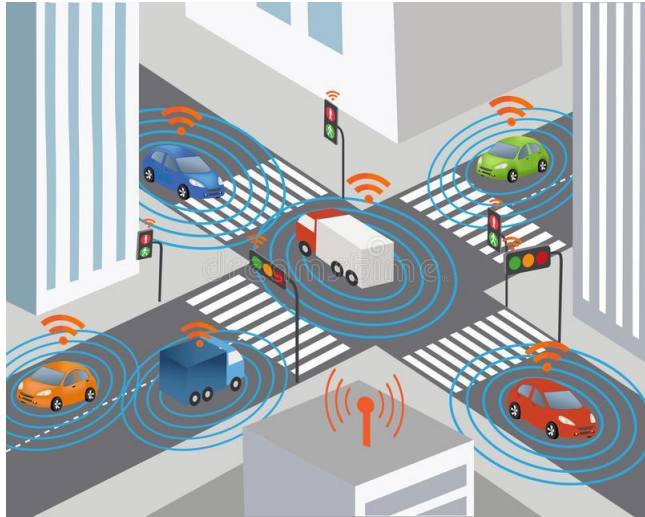
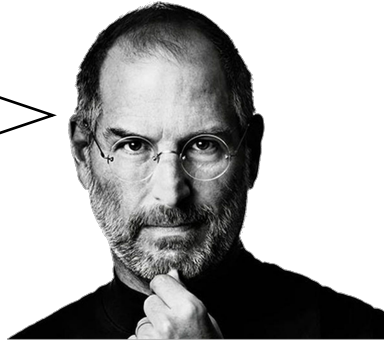


Think broadly!

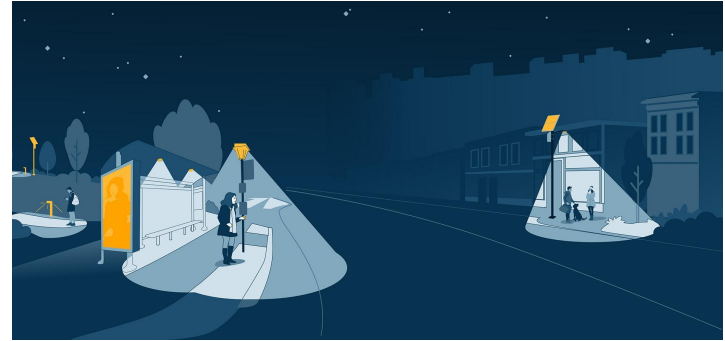


**Learning from the state of things
(Sensor Networks, Internet of Things)**

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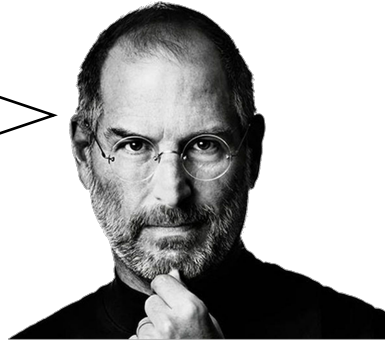


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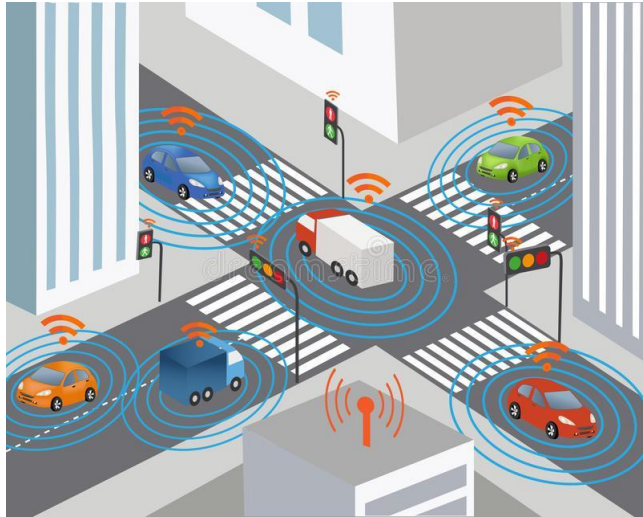


Learning From the State of the World

**Let's Get
Thinking!**



Learning From the State of the World



**Learning from the state of things
(Sensor Networks, Internet of Things)**



**Learning via Cell Phone
(Mobile Learning)**

Community Standards

Internal and External contributors.

- different standards for employees, casual contributors.
- developing standards for documents, design elements, contribution pipelines.

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- unplanned contributions to Rokwire repositories may not always be a good thing.

Supervised open-source:

- engage groups of people, invite to contribute to a specific repository, project.

What can we do to get Rokwire open-source activity to a critical mass?

Safer Illinois based on
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Hourly students (strategically placed) can help drive forward open-source

Ways In Which We Are Engaging Community

Onboarding Process

Wiki: <https://github.com/rokwire/rokwire-community/wiki>

Onboarding Guide:

<https://rokwirecommunity.substack.com/p/onboarding-guide-to-rokwire-community>

Newsletter: subscribe via badge, blog, Github repo, or inquiry from <http://rokwire.org>

Redundancies are good: helps community members participate and access docs in multiple ways.

Welcome to the Rokwire Community!

[Website](#), [Blog](#), [Wiki](#), [Twitter](#), [Contact](#)

<https://github.com/rokwire/rokwire-community/blob/master/README.md>

Tutorials for programming and the open-source environment

Resource	Location
Software Carpentries	link
The Turing Way	link
Open Source Orientation (Mozilla Science)	link
Programming Tutorials (Rokwire)	link
Video Tutorials (Rokwire)	link

Check out our community newsletter for the latest community news!

Issue	Substack
November, Issue 1	link
December, Issue 1	link
December, Issue 2.	link

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Onboarding Guide to the Rokwire Community



Welcome to Rokwire Community! The [Rokwire initiative](#) is now [open-source](#), and is looking for contributors on a number of fronts. You may have heard of Rokwire in conjunction with the [Illinois App](#) and [Safer Illinois](#). But there is so much more! While Rokwire enables the data integration capabilities of the existing applications, it is also a means to build information tools for a wide range of community settings.

What is a Contributor?

We approach the role of an open-source contributor from a broad perspective. The [traditional role of open-source software contributor](#) is supported, but we are also interested in contributors who can realize the full potential of the platform and its implications. This involves a wide range of activities, including but not limited to: contributing ideas in our open discussion forums, contributing to our Github repositories, developing research related to or enabled by the Rokwire platform, becoming involved in a collaborative paper or talk, or formally licensing the platform to create your own application. We are particularly interested in supporting members of underrepresented groups with opportunities for professional growth.

R COMMUNITY



Welcome to the Rokwire Community!

Smart, Healthy Communities Initiative is now on LinkedIn!



Interested in being updated on current events? Earn a digital credential by subscribing to our newsletter, or check out our calendar!



Rokwire Community News, December(1)

December, Issue 1



Rokwire Community

Dec 1



Newsletter (biweekly)

Thanks to Github users [karacw](#), [njo2](#), and [ortizreyes](#) for their recent contributions to the [Safer Illinois](#) repository. They are from Translation Studies class TRST 580 (Topic: Localization), and their contributions will make it easier to provide the Safer Illinois interface to users in a variety of natural languages (such as Portuguese).

Have ideas for new blog posts and tutorials? Make a request by leaving a comment on Github issues [#60](#) ([blog post](#)) and [#61](#) ([video tutorial](#)).



Rokwire

Rokwire is an interdisciplinary project for building an ecosystem for smart, healthy, and connected communities. The remaining modules will be made open soon.

<https://rokwire.org/> rokwire@illinois.edu [Part of University of Illinois System](#)



[Repositories](#) 54 [Packages](#) [People](#) 89 [Teams](#) 15 [Projects](#) 2 [Insights](#)

Code and documentation contributions

Top languages

[Go](#) [Python](#) [Dart](#)
[Objective-C](#) [Java](#)





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Browse

Search on figshare...

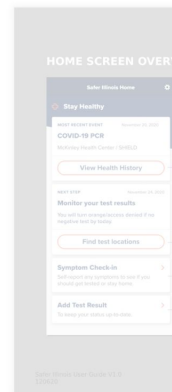
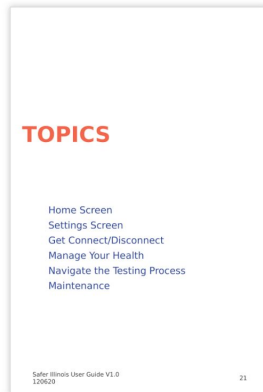
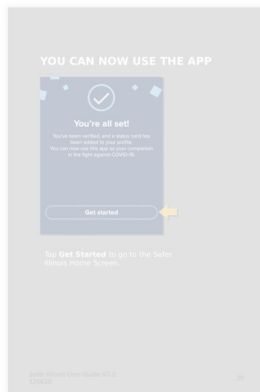
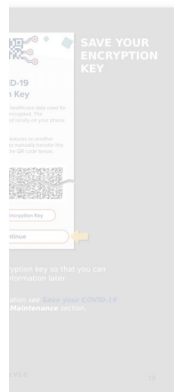
Upload

My data



Top languages

[Go](#) [Python](#) [Dart](#)
[Objective-C](#) [Java](#)



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MD5: 8db33db0b3403c88fc0ffb13ce4f91e0 |

< > 2/2 User Guide.pptx (25.24 MB)

Safer Illinois User's Guide

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BRADLY ALICEA, PHD

Community Manager, Rokwire

POSTS



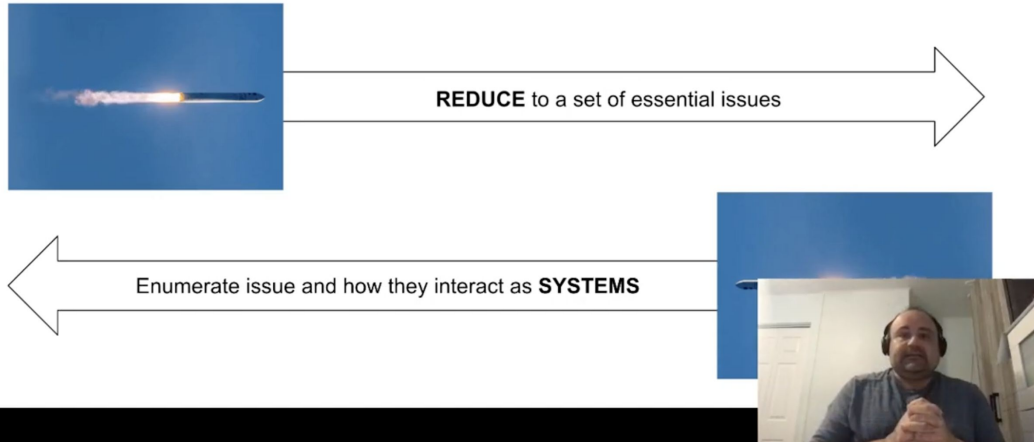
DECEMBER 2, 2020

Why Do We Have a Community?

Here are some new slides on why we have an open-source community. The more in-depth video tutorial and discussion (43 minutes long) is [available here](#).



Flow of Action in an open-source community



Blogging supplemented by videos: ways to communicate open-source values, common themes, tutorials, etc.

“Open-source Ethos” video (<https://youtu.be/r4nCmCojOcg>)

“Striving for Issue 0” blogpost (<http://publish.illinois.edu/bradly-alicea/2020/10/21/striving-for-issue-0-why-do-we-have-a-community/>)

Wiki (featuring the Rokwire Dictionary)

Welcome to the Rokwire Community wiki!



Rokwire Community is ready to engage with you! This Wiki will guide you through the basic terminology of the Rokwire platform, in addition to the things you will need to be a successful contributor to this community!

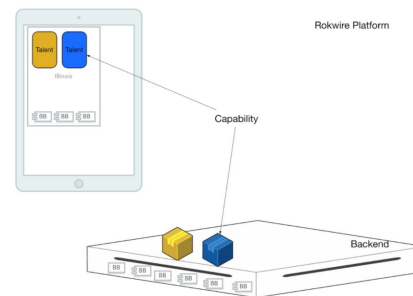
Check out the [Rokwire Community on the web](#) for more information about upcoming events, educational resources, publications, and more!

Are you already part of the Rokwire initiative? Then read our [internal contributor guidelines](#). Are you new to Rokwire? Read our [external contributor guidelines](#). Everyone should read about our [Open Source Community Guiding Principles](#)!

▼ Pages 31
<input type="text" value="Find a Page..."/>
Home
Apache license
Bug Reports, Accessibility Reports, and New Feature Requests
Community Events
Contributor License Agreement (CLA)
Event Categories
Existing and Proposed Building Blocks
External Contributor Guidelines
Google Summer of Code
Governance
How do I Get On Board?
How do I Get Started?
How does Rokwire work?
Illinois App

Rokwire Dictionary

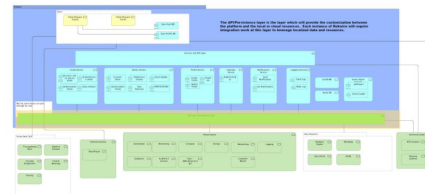
Bradly Alicea edited this page on Oct 9 · 3 revisions



There are also building blocks within the App side of Rokwire. These provide functionality to multiple talents. Identified app building blocks are: Authentication, logging, notification

Details of Building Block properties is discussed in [What is a building block?](#)

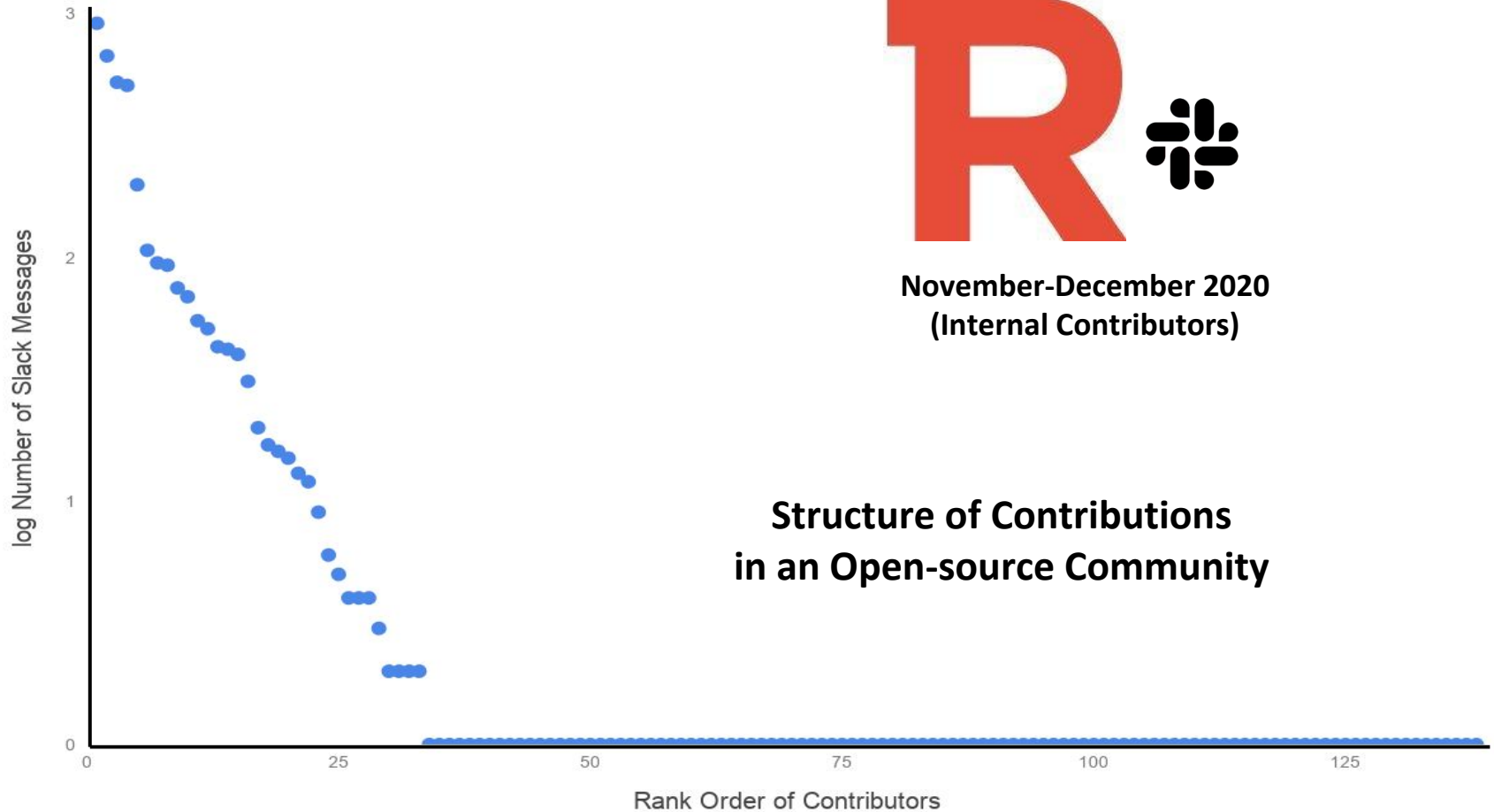
A review of Building Blocks, Capabilities, and Talents is discussed in [How does Rokwire work?](#)



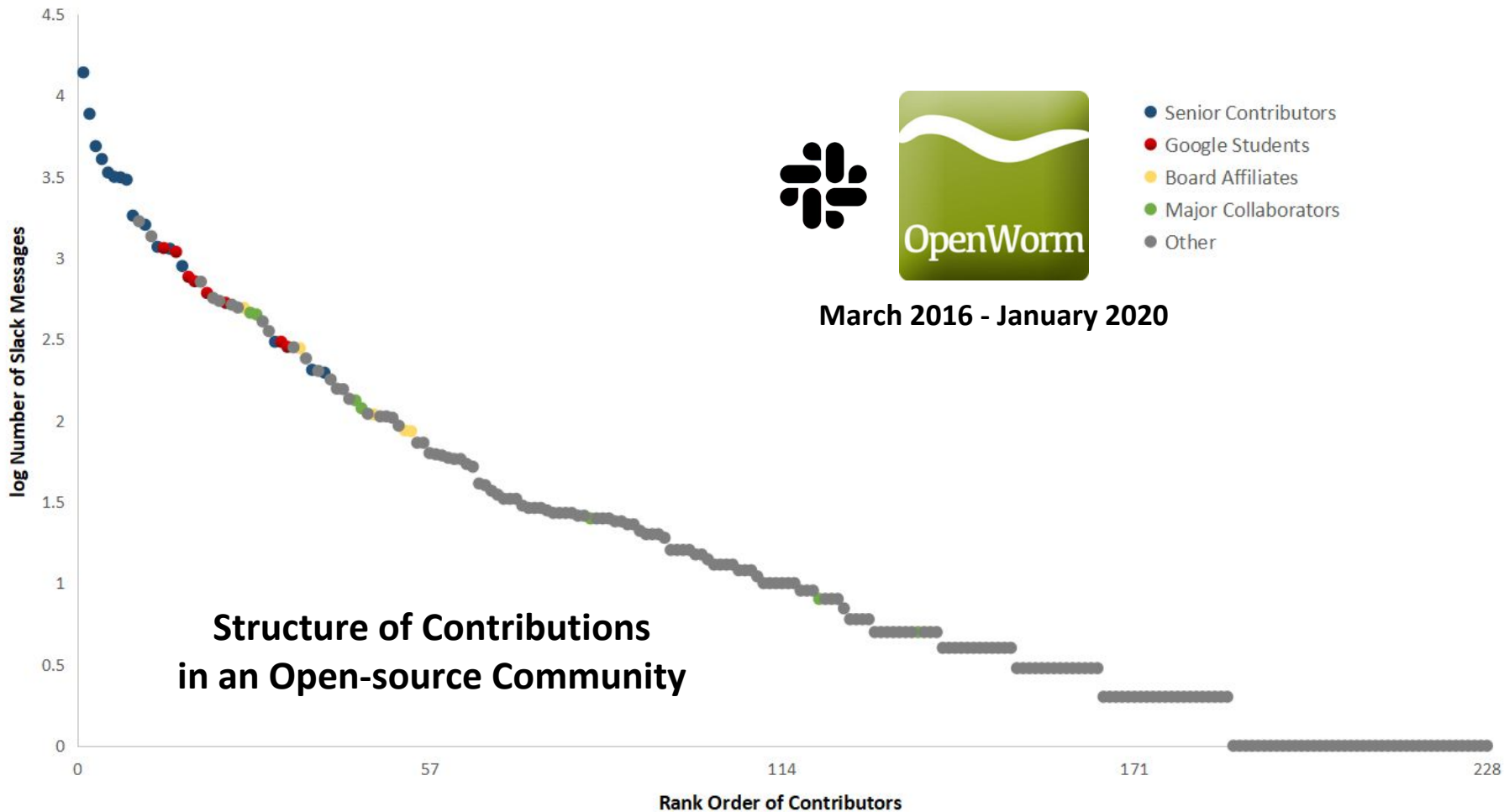
[Click to enlarge.](#)



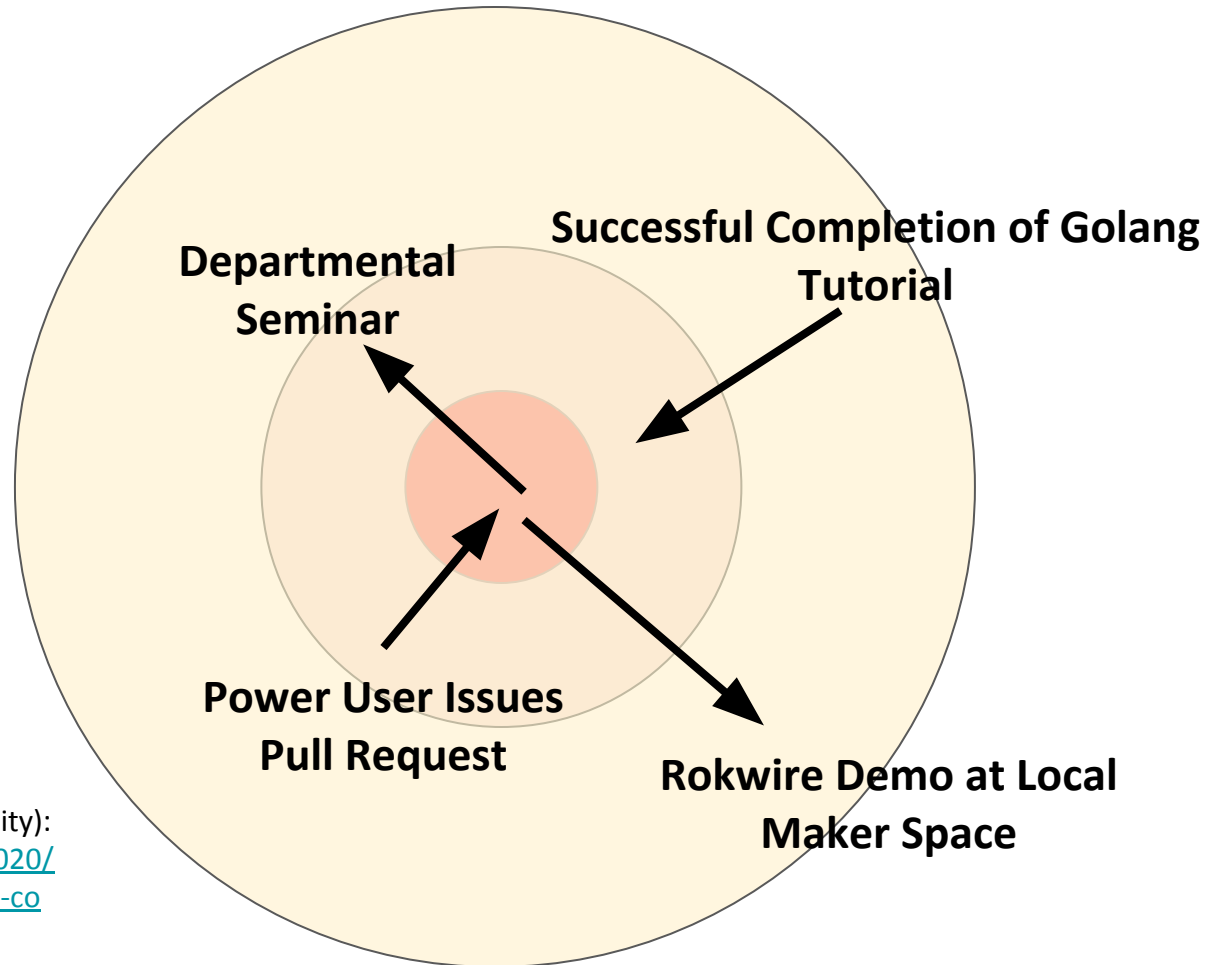
November-December 2020
(Internal Contributors)



**Structure of Contributions
in an Open-source Community**



Navigating the concentric layers of Rokwire Community flow structure.



Blogpost (Targeting in a Layered Community):
<http://publish.illinois.edu/bradly-alicea/2020/12/10/targeting-in-a-layered-open-source-community/>

How to make the community sustainable?

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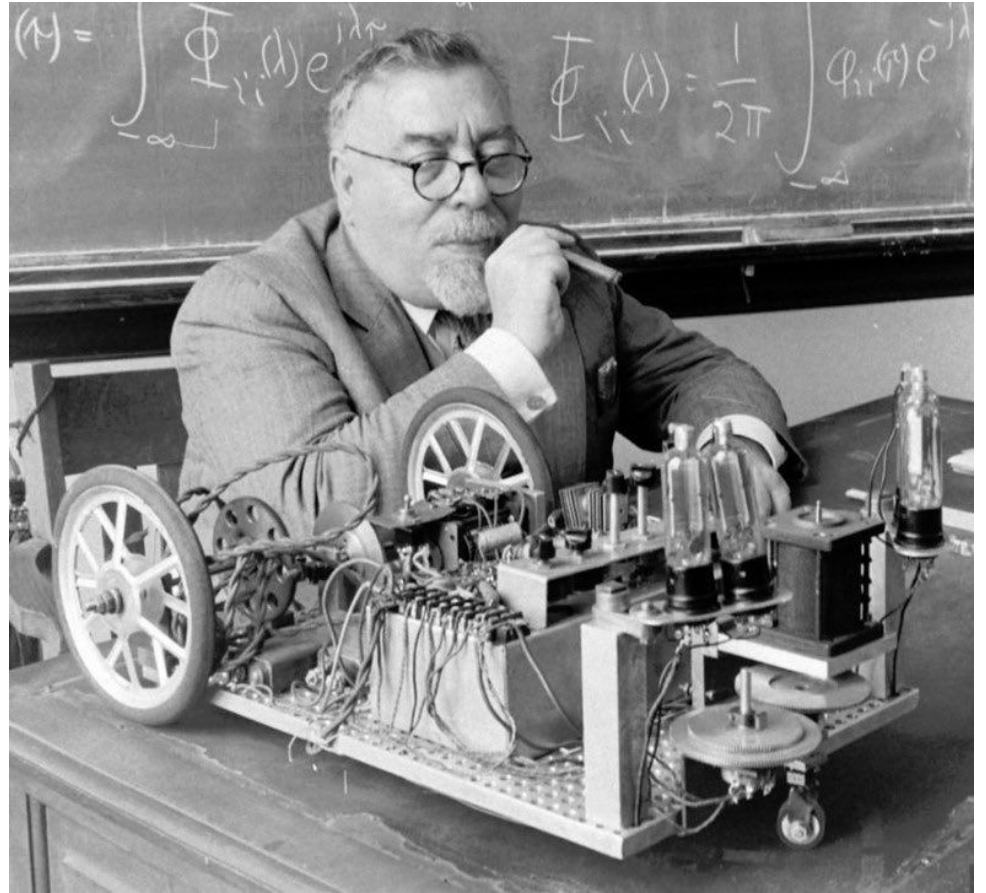
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- 3) continual maintenance of community resources and empowering community members to create resources.
- 4) Short- to medium-term research projects (via STRAT Lab).
- 5) Rokwire-adjacent initiatives (virtual worlds, simulations, data science, interdisciplinary education).

**Making cutting-edge (or
highly customizable) things!**



Norbert Wiener and his Animat

Github

Onboarding Guide

Web

Newsletter

Blog

Wiki

R COMMUNITY

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Github: <http://www.github.com/rokwire>

Community Calls and Public Events coming soon!