



# MERL Center

Welcome to Our Open Source Community!

MozFest | 9 March 2022

*in partnership with*



# Presenters



**Mala Kumar**

Director  
Tech for Social Good, GitHub



**Stephanie Coker**

Evaluation & Learning Consultant  
TCC Group



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General Manager  
Tribe AI



**Eric Jahn**

Founder  
HSLynk

*Please introduce yourself on the chat!*



# What is the MERL Center?

# What is MERL?



6 lines (5 sloc) | 1.01 KB

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## MERL Center working definition of monitoring, evaluation, research & learning (MERL)

- **Monitoring** refers to the routine collection and analysis of information on an ongoing basis. This helps understand progress toward objective targets and support regular (or iterative) course-correction throughout the life of the life of the project.
- **Evaluation** assesses a planned, ongoing or completed activity to assess whether the wider, overall objectives have been achieved, for whom, why (or why not), and how.
- **Research** serves to increase the common body of evidence within and beyond an implementing project. It helps to establish or confirm facts, reaffirm the results of previous work, identify potential solutions for new or existing problems, support hypotheses, or develop new theories.
- **Learning** is the incorporation of monitoring, evaluation and research knowledge into how we do things, and it also describes what happens when we change and adapt how we do things going forward, based on past experiences.

[View on GitHub](#)



# Why is MERL important in the Social Sector?

## Evidence-based interventions

How can we be sure an intervention leads to an outcome? How many steps does it take to get there?  
What are the inherent assumptions?

## Social interventions are the most complex solution to engineer

How do you ensure participants are sticking to the intervention? How do you know when to change the type of intervention?

## Historical 'savior complexes'

How do you determine what's necessary for change to happen? How do you make sure you're 'doing no harm'? How do you include all stakeholders and participants?



# Why the MERL Center?

- GitHub Social Impact, Tech for Social Good founded the MERL Center in September 2019 at the MERL Tech Conference
- MERL practitioners often work in silos. They wanted a way to collaborate on content on relevant tech topics, like open source software and open data.



	Functional Area 1	Functional Area 2	M & E	Functional Area 4	Functional Area 5
Sector 1	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used
Sector 2	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used
Sector 3	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used
Sector 4	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used
Sector 5	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used
Sector 6	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used
Sector 7	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used	OS Tools Used

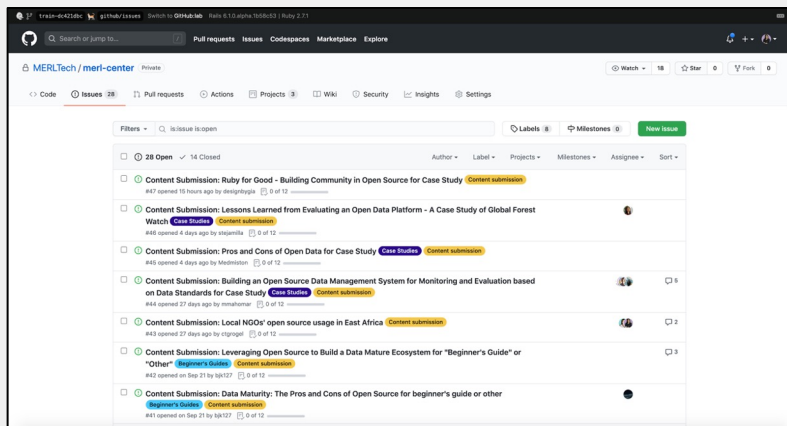
# Collaboration in the MERL Center



- 50+ members in 15+ countries
- More than ¼ members are women of color
- Private, public, social sector
- Data scientists, project managers, UX designers, strategists and more

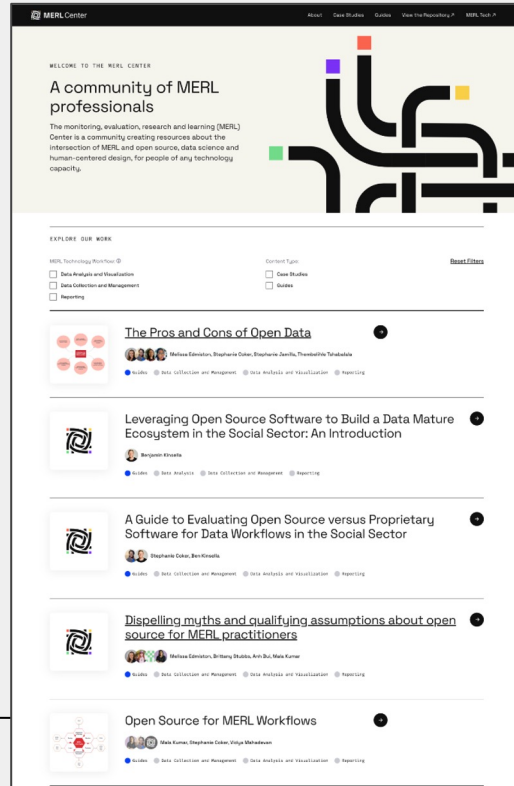
[Read member testimonials here](#)

Collaborate on GitHub, Google Workspace, Slack



Use GitHub Pages to Publish to Our Website:

<https://merlcenter.org>





# MERL Center on GitHub

The screenshot shows the GitHub repository page for MERLCenter-public. The repository is public and has 13 unwatchers, 4 forks, and 11 stars. The main content area displays a file tree with the following items:

File/Folder	Description	Last Update
.github	Update CODEOWNERS	6 months ago
_caseStudies	Update 2022-01-13-the-impact-assessment-of-global-forest-watch...	2 months ago
_data	tag integration	7 months ago
_includes	table word break enabled and author fallback image	4 months ago
_includes	Update subscribe.html	2 months ago
_layouts	table word break enabled and author fallback image	4 months ago
archived-pieces	Create 2021-09-07-pros-cons-open-data-overview.md	5 months ago
assets	Merge pull request #68 from MERLTech/stejamilla-patch-1	2 months ago
contributing-images	Delete samplefile.md	7 months ago
node_modules	New Jekyll site	7 months ago
script	New Jekyll site	7 months ago
stylesheets	Create master branch via GitHub	2 years ago
.gitignore	New Jekyll site	7 months ago
404.html	guides url	6 months ago
CNAME	Create CNAME	7 months ago

The right sidebar contains the following sections:

- About:** Website and public, open source content of the MERL Center. See website at <https://mericenter.org>. Includes tags for open-source, 1c14d, and merl.
- Readme:** Link to the repository's README.
- MIT License:** Link to the repository's license.
- Code of conduct:** Link to the repository's code of conduct.
- Stars:** 11 stars.
- Watching:** 13 watching.
- Forks:** 4 forks.
- Releases:** No releases published. Link to create a new release.
- Packages:** No packages published. Link to publish your first package.





# MERL Center Content

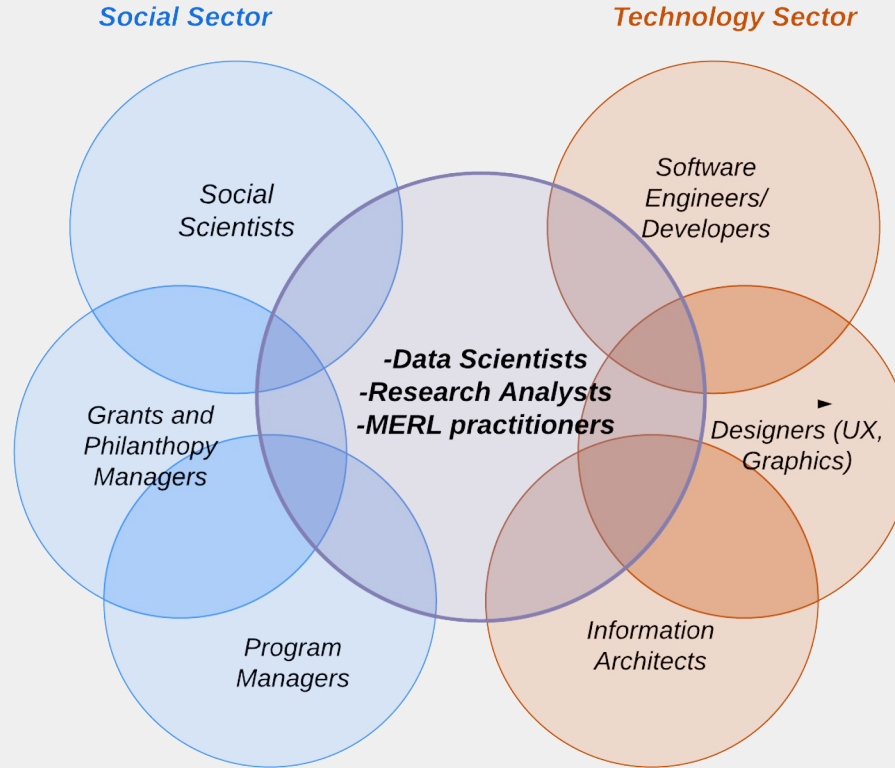
# Open Source for MERL Workflows - Problem Statement



[Copied from Issue:](#)

*“How to bridge the gap of communication that often exists between software devs and MERL folks. I'd run into the issue a couple of times, as I facilitated conversations between data consultants and nonprofit program coordinators. Not speaking the same language really hampered discussions, especially when a non-technical nonprofit is trying to implement new technology solutions for monitoring and measuring the impact of their programs. Also came across this issue even as we were starting to write the article.”*

# Open Source for MERL Workflows - Problem Statement



# Open Source for MERL Workflows - Problem Statement



## *Typical Social Sector Request:*

*“How do create a tool that effectively monitors my program participants as they progress along a spectrum of improvement so I can figure out how to expedite the progression? All using Free and Open-Source Software?”*



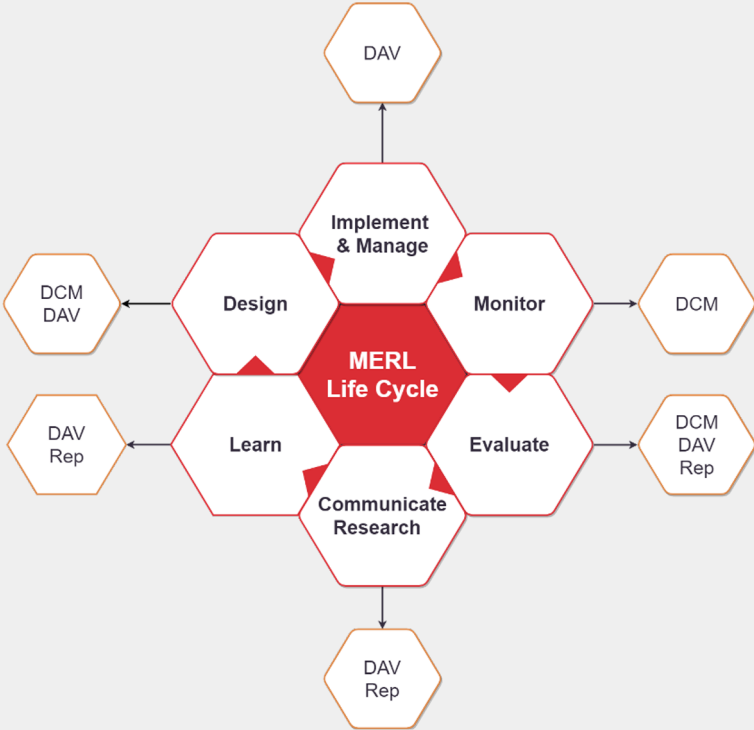
# Open Source for MERL Workflows - Guide

By Stephanie Coker, Mala Kumar and Vidya Mahadevan

This piece of content maps out MERL workflows and tech workflows to create “MERL Technology” workflows:

- Data Collection and Management (DCM)
- Data Analysis and Visualization (DAV)
- Reporting (Rep)

[Read the guide on the website](#)



# Open Source for MERL Workflows - Problem Statement



## **Typical Social Sector Request:**

*“How do create a tool that effectively monitors my program participants as they progress along a spectrum of improvement so I can figure out how to expedite the progression? [All using Free and Open-Source Software?](#)”*

## **Translation Using MERL workflows:**

*“How do implement an ongoing OSS data collection tool with program participants, create an OSS database, analyze data from OSS database with an OSS tool and create periodic reports using an OSS data viz tool?”*

# Open Source for MERL Workflows - Demo



The screenshot shows a web browser window displaying the GitHub repository page for MERLCenter-public. The browser's address bar shows the URL `github.com/MERLCenter-public`. The repository page includes the following information:

- Repository name: `MERLCenter-public` (Public)
- Description: Website and public, open source content of the MERL Center. See website at <https://merlcenter.org>
- License: MIT License
- Statistics: 11 stars, 4 forks
- Actions: Starred, Unwatch
- Navigation: Code, Issues (1), Pull requests, Discussions, Actions
- Branch: main
- Recent activity: A merge pull request #72 from MERLCenter-public/dependabot... merged 7 days ago with 419 commits.
- Files: README.md
- Footer: Welcome to the MERL Center

# OSS and Data Maturity - Problem Statement



- The social sector has benefited enormously from [data analytics technologies](#)
- However, organizations still struggle building coherent data strategies around data maturity

## Common Data Maturity Frameworks in the Social Sector

- [DataKind UK/Data Orchard Data Maturity](#)
- [CARE's Responsible Data Maturity](#)
- [Data.org Data Maturity Readiness](#)

There is little guidance on **the role of software** and its role in implementing elements of data maturity strategies



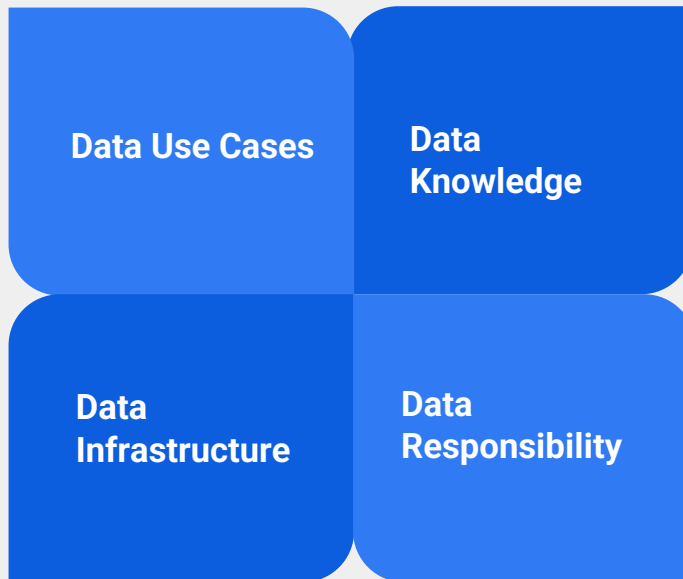
# OSS and Data Maturity - Guide



By Ben Kinsella with inputs from Rachel Wells

- What is open source software ( OSS)?
- What is the interplay between OSS and proprietary software within organizations?
- Why is OSS an important component when building data mature organizations?

[Read the guide on the website](#)



# OSS and Data Maturity Map



DATA  
INFRASTRUCTURE



DATA USE CASES



[GitHub Privacy Practices](#)



DATA KNOWLEDGE



DATA RESPONSIBILITY

# HSLynk SDGs and Human Services Interoperability - Problem Statement



- Measuring outcomes (such as SDGs) to improve social services impact is increasingly important for philanthropic and public benefit programs.
- Tools are needed to help communities and foundations measure the impact of their investments. Through better measurement and tracking, positive change can be made by backing proven and replicable interventions.
- There is no cost effective infrastructure for communities to track outcomes across their continuum of program services and benefits.
- To achieve outcomes, fine-grained client consent and activity sharing across programs must support outcome measurement.

# HSLink SDGs and Human Services Interoperability - Guide



## Project History

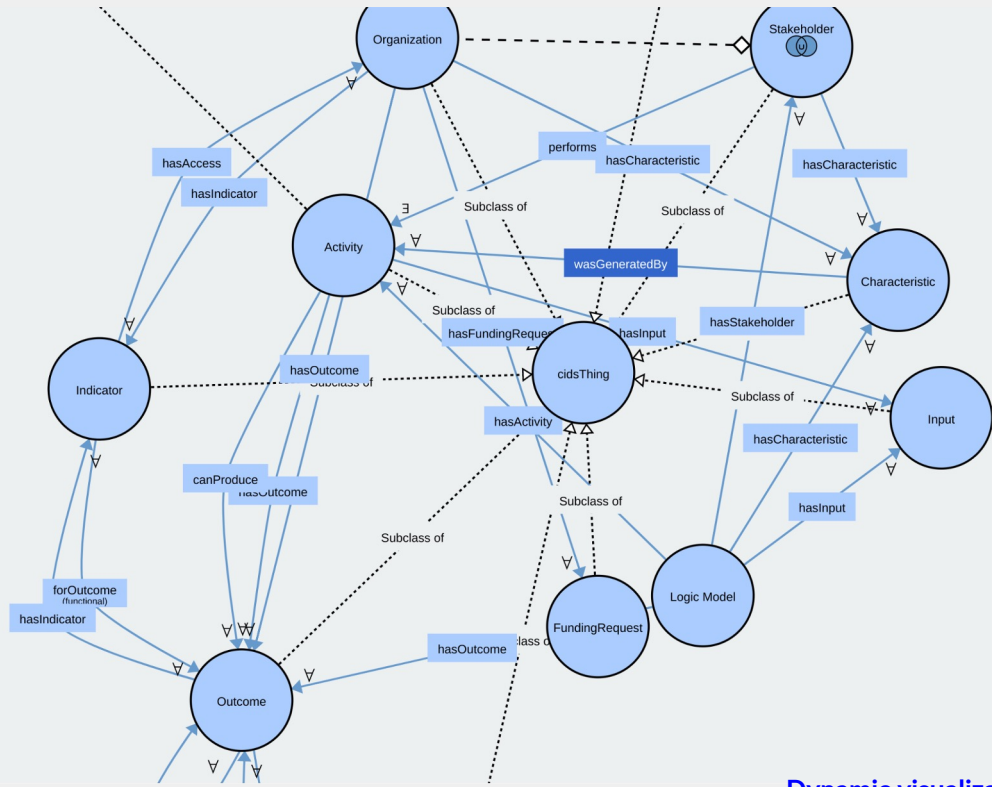
- 2015 - 2020: development under an open source license (Mozilla Public License, v2) by a private US-based SaaS company.
- 2021: HSLink spun off as a non-profit entity, to pivot to a community hosted project focusing on Sustainable Development Goals
- 2022: HSLink simplifying its software stack to meet goals of ease of replication/modification, flexibility, and lowered cloud hosting costs



# HSLynk SDGs and Human Services Interoperability - Guide



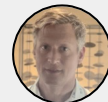
- Measuring progress toward Sustainable Development Goals at the macro level.
- The Common Impact Data Standard\* is an ontology that can help track SDG progress.
- MERL Center collaboration with standards.



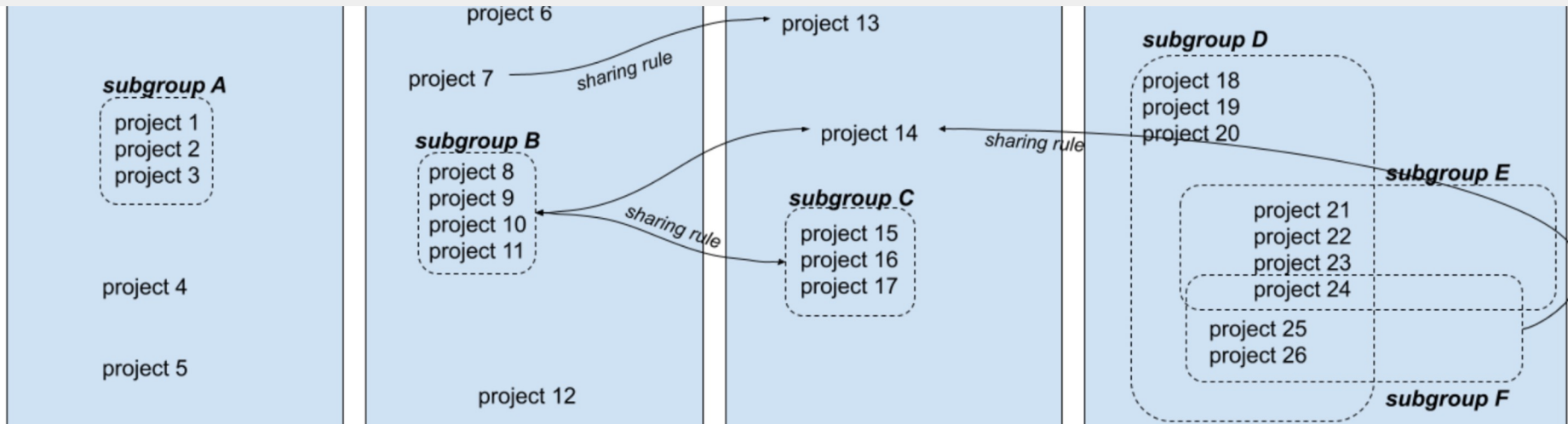
\*[See here](#)

[Dynamic visualization](#)

# HSLynk SDGs and Human Services Interoperability - Guide



At the micro level, community information sharing is complex, and overlaid client consent rules result in even more complex sharing.



# HSLynk SDGs and Human Services Interoperability



- We want to build the Common Impact Data Standard (CIDS) web ontology into HSLynk, so that SDG outcomes could be tracked in conjunction with human services, and potentially other types of services and program enrollments. Together, HSLynk and CIDS could serve as a generic, human services outcome and enrollment system for free, worldwide use.
- This would help funders measure and track the impact and efficacy of their investments within social services and healthcare and accelerate positive change.

Where we want to go:

- Containerize HSLynk for easier deployment and for development and testing, cloud platform agnostic
- Insert schema-less data lake to store open data formats for SDGs (RDF knowledge graph, Iceberg, Parquet)
- Worldwide scope, generalized framework, MERL Center participation and support

Contact us: [eric@alexandriaconsulting.com](mailto:eric@alexandriaconsulting.com)



# How do I Join the MERL Center?





# How do I Join the MERL Center?

We ask you have at least one year of professional work experience in MERL or data science, human-centered design or open source solutions.

Go to <https://mercenter.org> or directly to <https://forms.gle/ULFWYt6y4fkw2FH28>

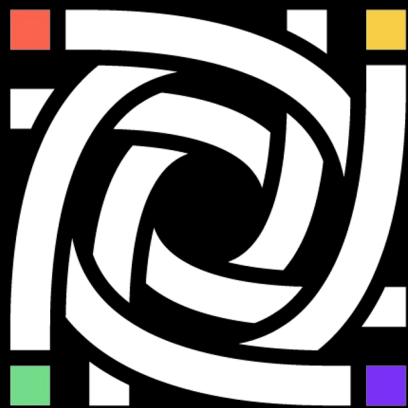
The screenshot shows a web browser window with the URL [mercenter.org](https://mercenter.org). The page features a dark navigation bar with the MERL Center logo and links for 'About', 'Case Studies', 'Guides', 'View the Repository', and 'MERL Tech'. The main content area has a light green background with the heading 'Join the MERL Center!' and the text 'Please [fill out this form](#) if you'd like to participate in the MERL Center! We're always looking for new members.' Below this is a dark button with the text 'Fill out the form' and a right-pointing arrow. The footer contains copyright information: '© MERL Tech 2022. All Rights Reserved. | Supported by Social Impact' and links for 'Terms' and 'Privacy'.



# MERL Center Stipend, Cohort 2

Application launches on 14 March 2022!

The requirements and link will be posted on <https://merlcenter.org>



**MERL Center**