

Share and Preserve Your Code

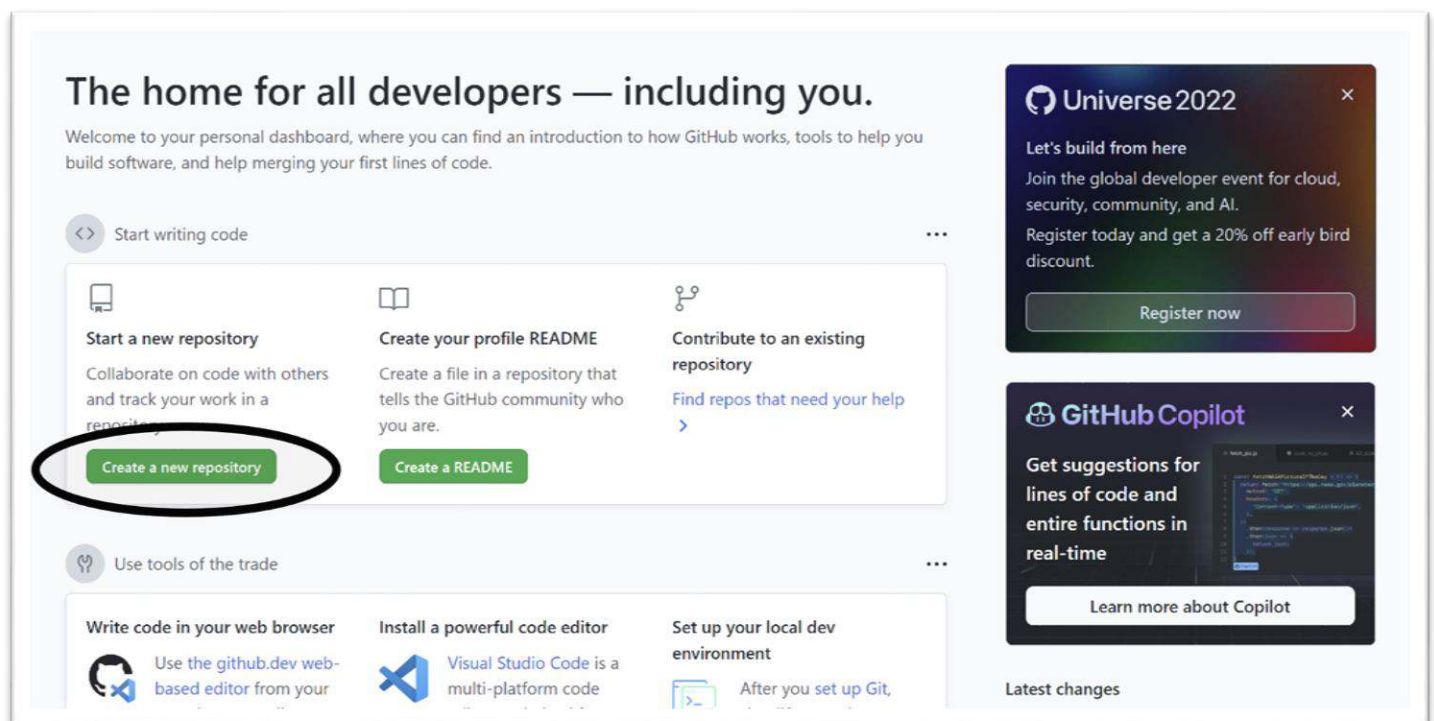
Publishing your code offers many benefits. In addition to **preserving** your code and making it **accessible** to others, publishing also ensures others can **cite** it, **reproduce** it, and helps you contribute to the **open science** movement.

This guide will show you how to use [Github](#) to publish your code and [Zenodo](#) to archive it and create a citable DOI for your software.

First: Set Up a GitHub Repository

A *GitHub repository* can house anything relevant to your project (including code, API documentation, data sets, spreadsheets, etc.) It will have a unique URL you can share with others.

1. Log in to [Github](#).
2. Click the green “Create Repository” button



3. Choose a descriptive name and write a brief description for your repository.
4. Make the repository public (this allows you to archive it).
5. Add a README file now or add it later (just make sure you include one!)
6. Choose which files not to track (if applicable).
7. [Choose a license](#) for your repository.
8. Create your repository.

Create a new repository
 A repository contains all project files, including the revision history. Already have a project repository elsewhere?
[Import a repository.](#)

Owner * / Repository name *

Great repository names are short and memorable. Need inspiration? How about [glowing-telegram](#)?

Description (optional)

Public
 Anyone on the internet can see this repository. You choose who can commit.

Private
 You choose who can see and commit to this repository.

Initialize this repository with:
 Skip this step if you're importing an existing repository.

Add a README file
 This is where you can write a long description for your project. [Learn more.](#)

Add .gitignore
 Choose which files not to track from a list of templates. [Learn more.](#)

Choose a license
 A license tells others what they can and can't do with your code. [Learn more.](#)

You are creating a public repository in your personal account.

Annotations:

- Yellow arrows point from the **Repository name** field to a box: **Name and describe your repository**
- Yellow arrows point from the **Public** radio button to a box: **Make it public so it can be archived**
- Yellow arrows point from the **Add a README file**, **Add .gitignore**, and **Choose a license** sections to a box: **Make your selections for README, files to ignore, and license.**
- A yellow arrow points from the **Create repository** button to a box: **Create your repository**

Next: Archive Your Repository in Zenodo

Zenodo is an open repository that preserves your code and will archive your GitHub repository each time you create a new release. Each submission in Zenodo will be assigned a DOI (digital object identifier), meaning your code can be cited by others.

Archiving in Zenodo requires two steps: linking your GitHub repository with Zenodo and then creating and publishing a release of your repository.

Link GitHub with Zenodo:

1. Log in to [Zenodo](#) with your GitHub account. (Zenodo may prompt you to authorize GitHub).

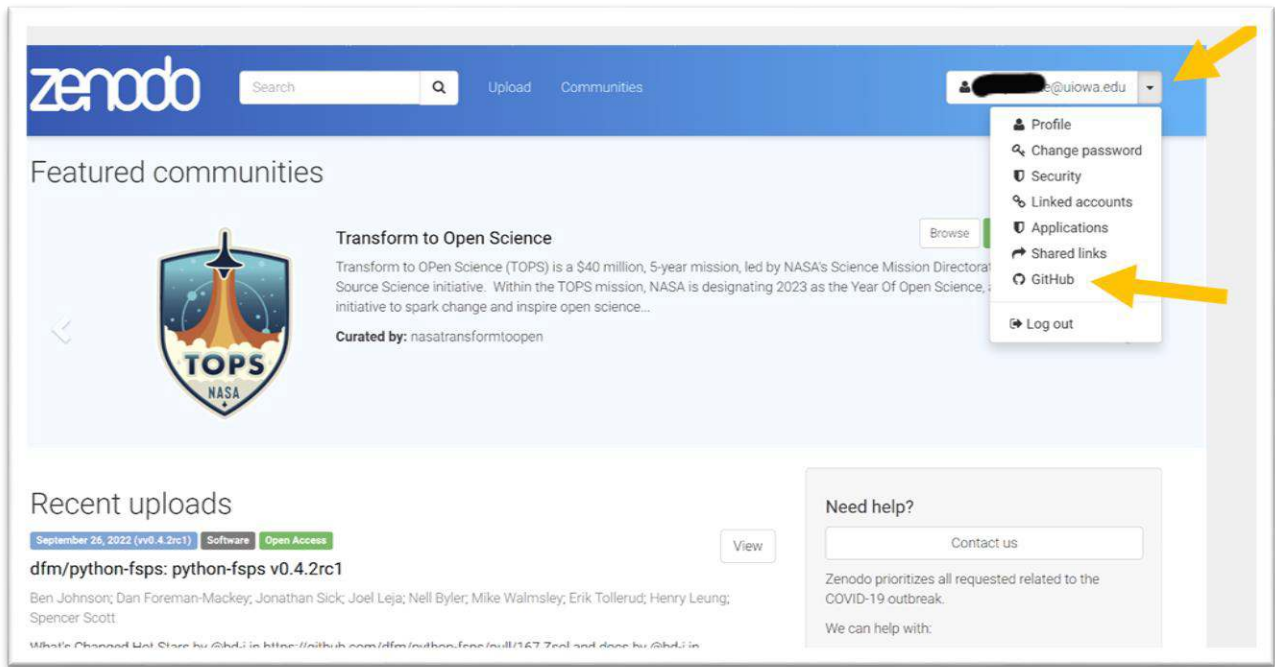
zenodo

Log in to account

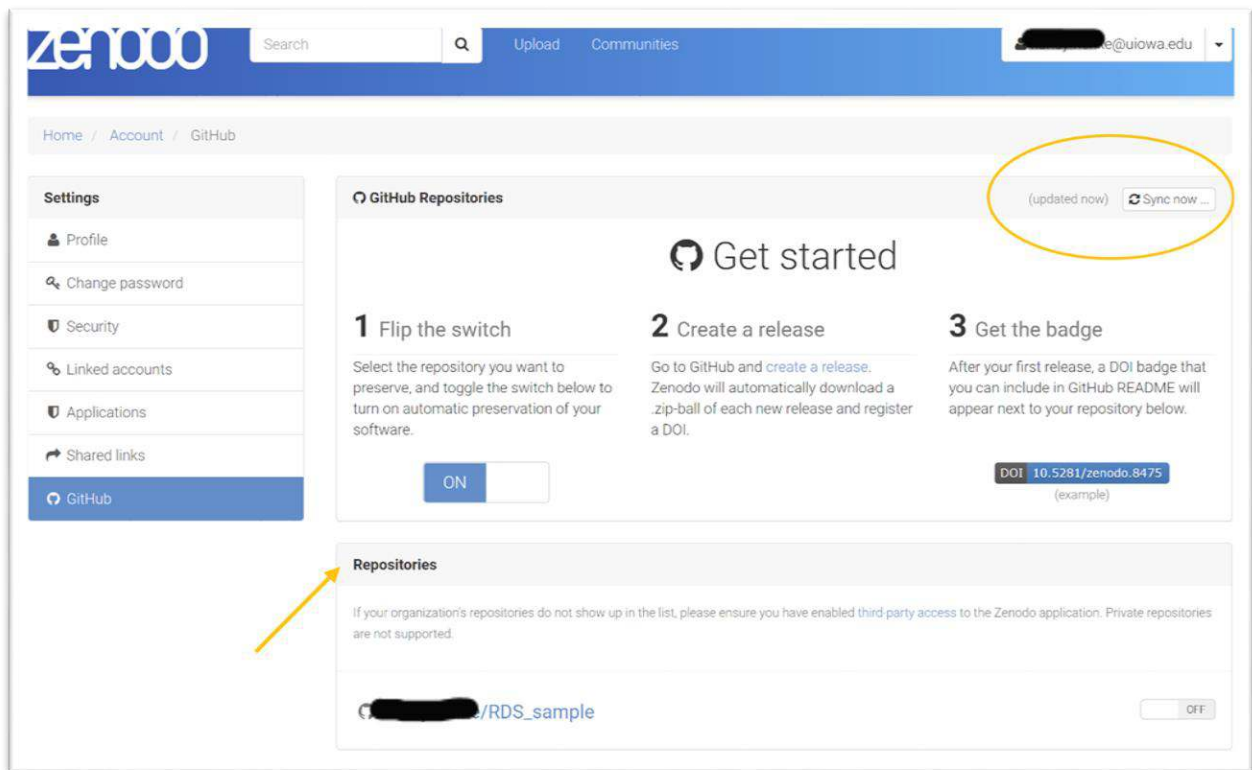
- OR -

New to Zenodo? [Sign Up](#)
[Privacy notice](#)

2. From the drop-down menu next to your email address, select GitHub.

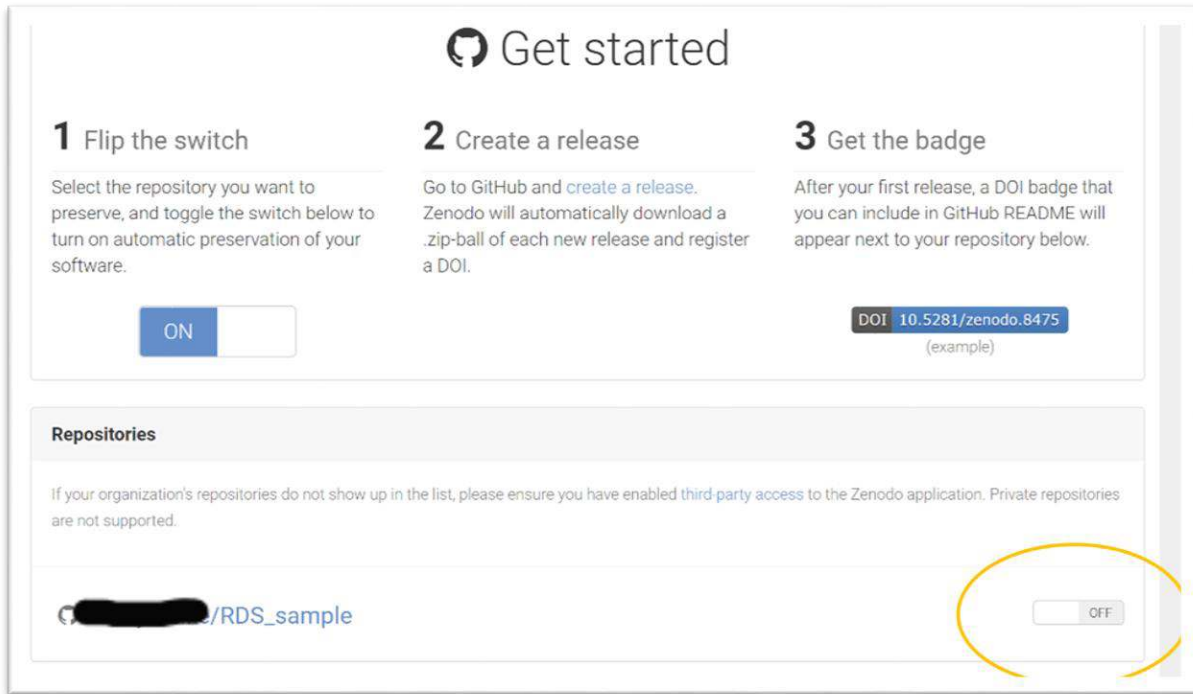


3. You will see your GitHub repositories. If needed, choose “Sync Now” to update.

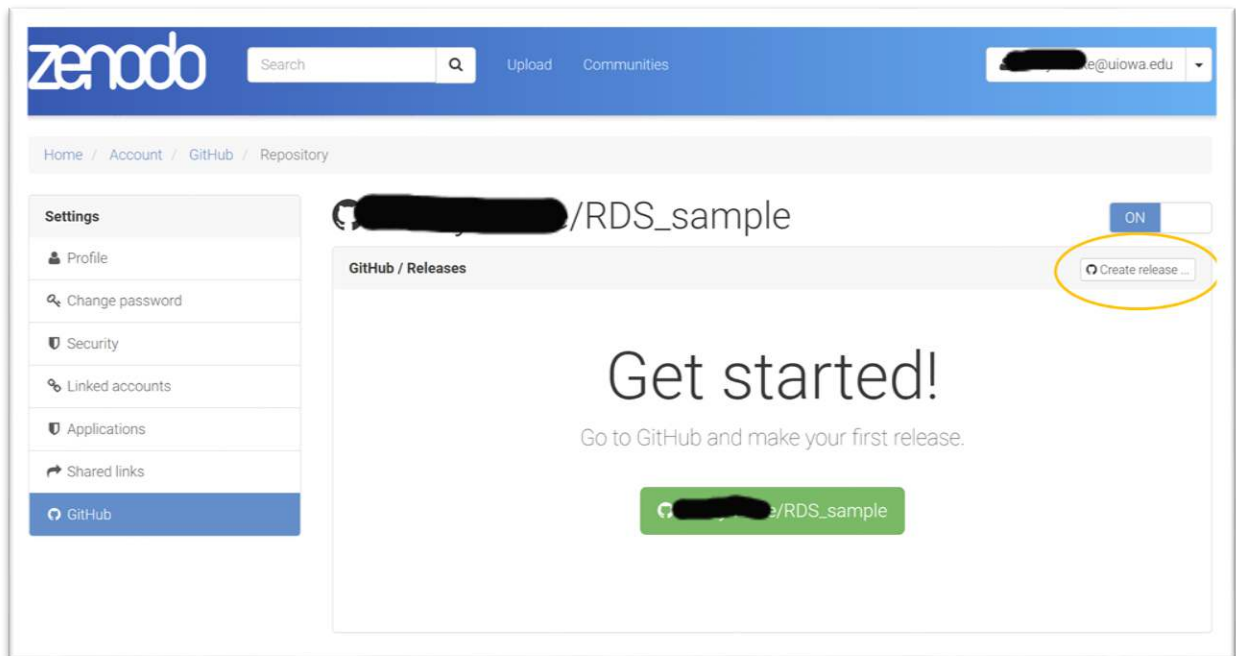


Archive Your Repository

1. Toggle the "on" button next to the repository you want to archive.



2. Click on the name of the repository.
3. Choose the "Create Release" button. This redirects you back to GitHub's repository page.



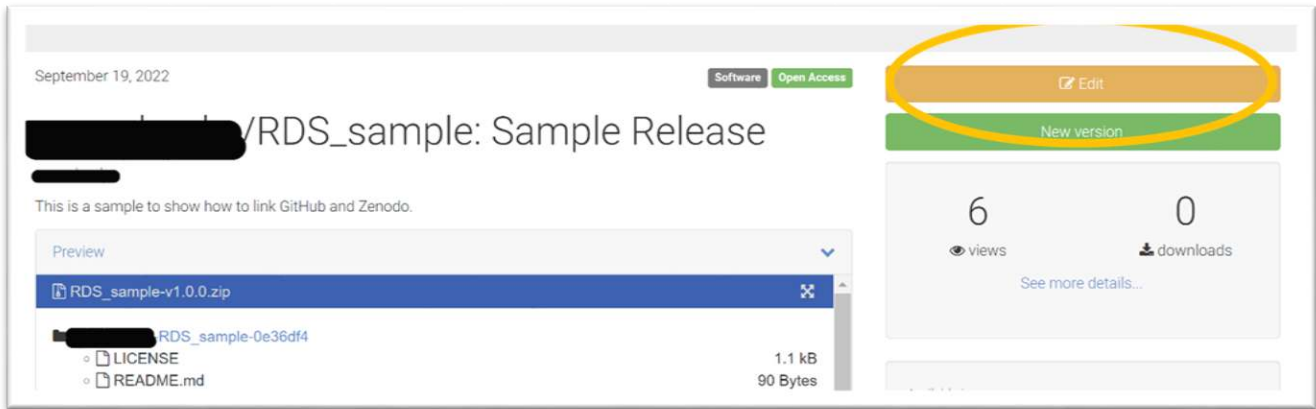
4. Complete the fields (title, description, version number.) If this is your first release, use version number v1.0.0.
5. Click "Publish Release" at the bottom of the page.

Add Your Repository to the University of Iowa Community on Zenodo

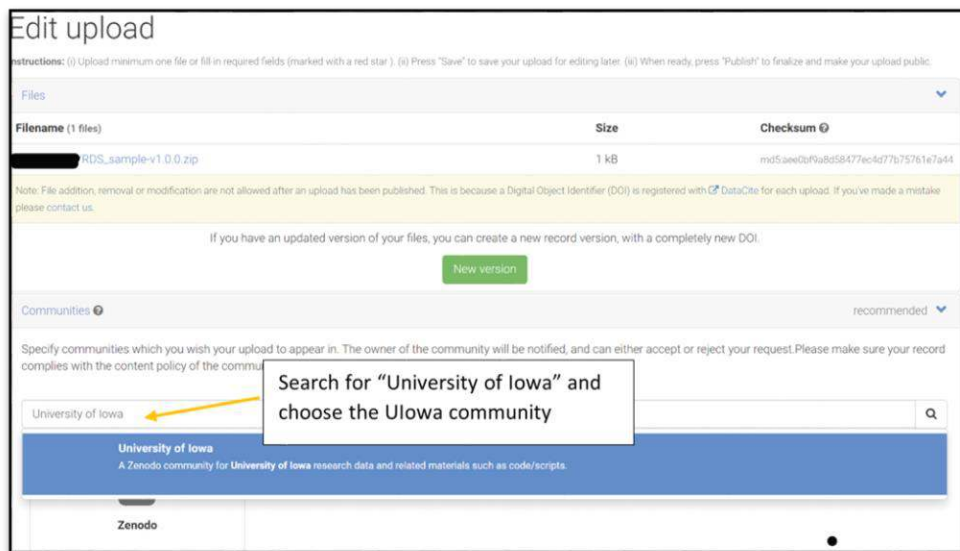
Uploading your repository to the Ulowa community will allow other Ulowa researchers to easily find your code (and for you to find theirs!)

1. From your list of Zenodo repositories, click the DOI link for the repo you want to add.

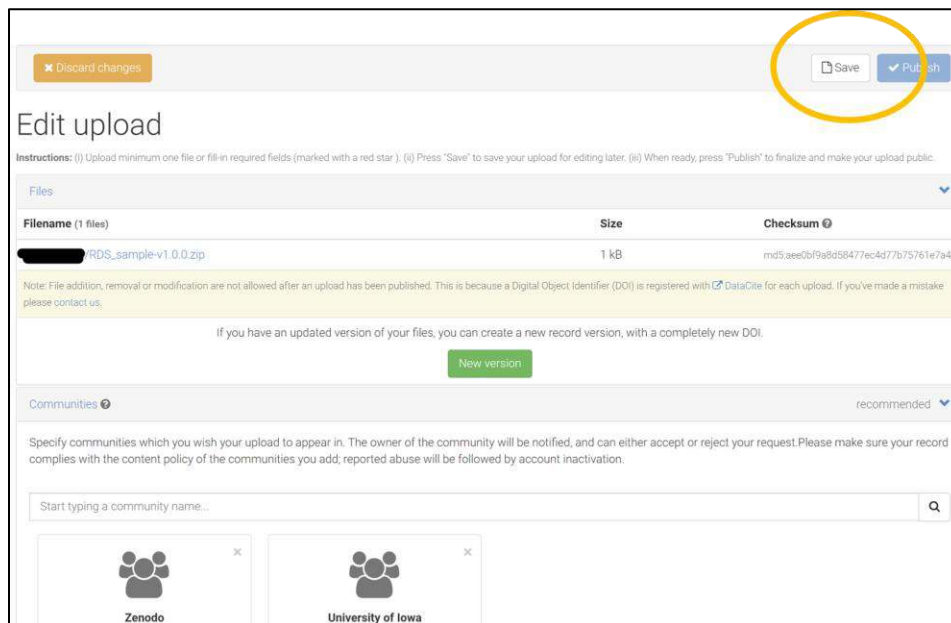
2. Choose "edit."



3. Search for and choose the University of Iowa community.



4. Save



What Now?

If you return to Zenodo and access GitHub through Zenodo, you should see your repository listed under “Enabled Repositories” with a blue DOI button next to it. (If it’s not there, choose “Sync Now”).

Now you can:

1. Edit the archive and/or publish a new version.
2. Add a description of the repository and write the metadata.
3. Click the blue DOI button to copy the badge in Markdown and add it to your README in GitHub.

