

Undergrad Research Opportunities Around Open Source

*Jeffrey Young, PhD · Principal Research Scientist · Partnership for
Advanced Computing Environments (PACE) · SCS Adjunct Faculty*

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Research Areas

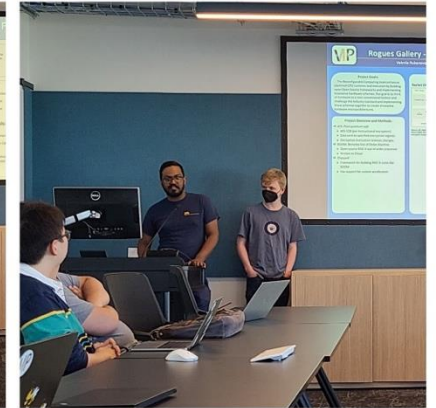
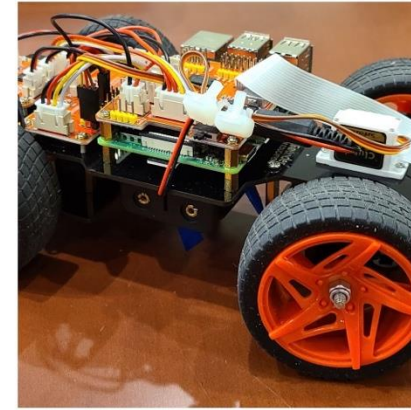
Future Computing with the Rogues Gallery VIP class

- Come to VIP Rush on August 20th to learn more!

Open Source development topics as part of the Open Source Program Office

CRNCH Rogues Gallery testbed

- Some opportunities for more senior students



What Opportunities are There For Open Source Research?

We are looking to create new tools and training to help students be more effective in working on open source projects.

Our near-term goal is to create an asynchronous training program to teach other students how to effectively use Git, CI/CD, unit testing, and other related topics.

git merge: A
Fast-Forward Merge

```
~/git_workflow$ git checkout master
Switched to branch 'master'
Your branch is up to date with 'origin/master'.
~/git_workflow$ git merge types
Updating 3b32394..a78b86f
Fast-forward
 my_abs.py | 10 ++++++----
 1 file changed, 7 insertions(+), 3 deletions(-)
```

- Suppose we want to update "master" with the changes from "types".

Open Source Projects

Search project by name...

About This Resource

This page provides an overview of Georgia Tech open source research projects curated by the Georgia Tech Open Source Project Office (OSPO). Georgia Tech PIs and researchers can submit their work via the form below, and all submissions are reviewed via a PR process before being posted.

If you have any questions about this resource, please reach out to us via email at ospo-directors@gatech.edu.

Project Area

- Artificial Intelligence
- Bioscience
- Computer Science
- High Performance Computing
- Computer Graphics
- Robotics
- Human-Computer Interaction

Name	Project Areas	Licenses
> Spatter	HPC	MIT

Offering credit and pay opportunities

Required and Desired Skills

Required skills: Familiarity with Linux tools and command line; some basic experience with programming (Python/C/C++)

Ideal skills: Familiarity with Jupyter notebooks, GitHub issues and actions

oss-training / notebook-lessons / oss-module-01-git.ipynb

Preview Code Blame 2732 Lines (2732 loc) · 88.8 KB

developer introduced the bug. The intent is not to blame or shame anyone. Rather, the idea is that the bug is the one who is most likely to know that part of the codebase and respond to that bug quickly.

Parts of a Git Project Directory

The contents of a Git repo are stored on your computer as normal files in a normal directory. In Git, this is called the **working tree**. You can edit these files freely with your usual text editors and IDEs.

On your computer, changes to the files are stored in the **local repository** (or local **database**). So when you **commit**, you save new versions of the files; and how to retrieve (or **checkout**) previous versions of the files.

A small project directory is shown below.

- The database and metadata are stored in the hidden `.git/` directory. You can treat this as a database, and the database and metadata should be via `git` commands.
- `my_program.py` and `README.md` are files you are actively working on. You definitely want to track these.
- `__pycache__` contains intermediate bytecode from running your Python program. You probably don't want to track the local repo...

```
~/my_git_project$ ls -la
total 95
drwxr-xr-x  4 gburdell  staff   6 Jan 25 12:33 .
drwx--x--x 43 gburdell  staff  97 Jan 25 12:33 ..
drwxr-xr-x  7 gburdell  staff  10 Jan 25 12:33 .git
-rw-r--r--  1 gburdell  staff  69 Jan 25 12:32 my_program.py
drwxr-xr-x  2 gburdell  staff   3 Jan 25 12:33 __pycache__
-rw-r--r--  1 gburdell  staff  51 Jan 25 12:33 README.md
```

Interested?

Fill out the Interest Form with your CV at
<https://jyoung3131.github.io/students/student-research/>

or

Email Dr. Young - jyoung9@gatech.edu