

**2017 AMS Annual Meeting  
Student Conference  
Tools of the Trade**

# GitHub



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<https://github.com/mmbell>

# Why use GitHub?

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- **Keep your code safe and backed up in the cloud**
- **Track code changes and versions with ease**
- **Keep it private, or make it open source and collaborate with others**
- **Find new projects, libraries, or code snippets to help your research**

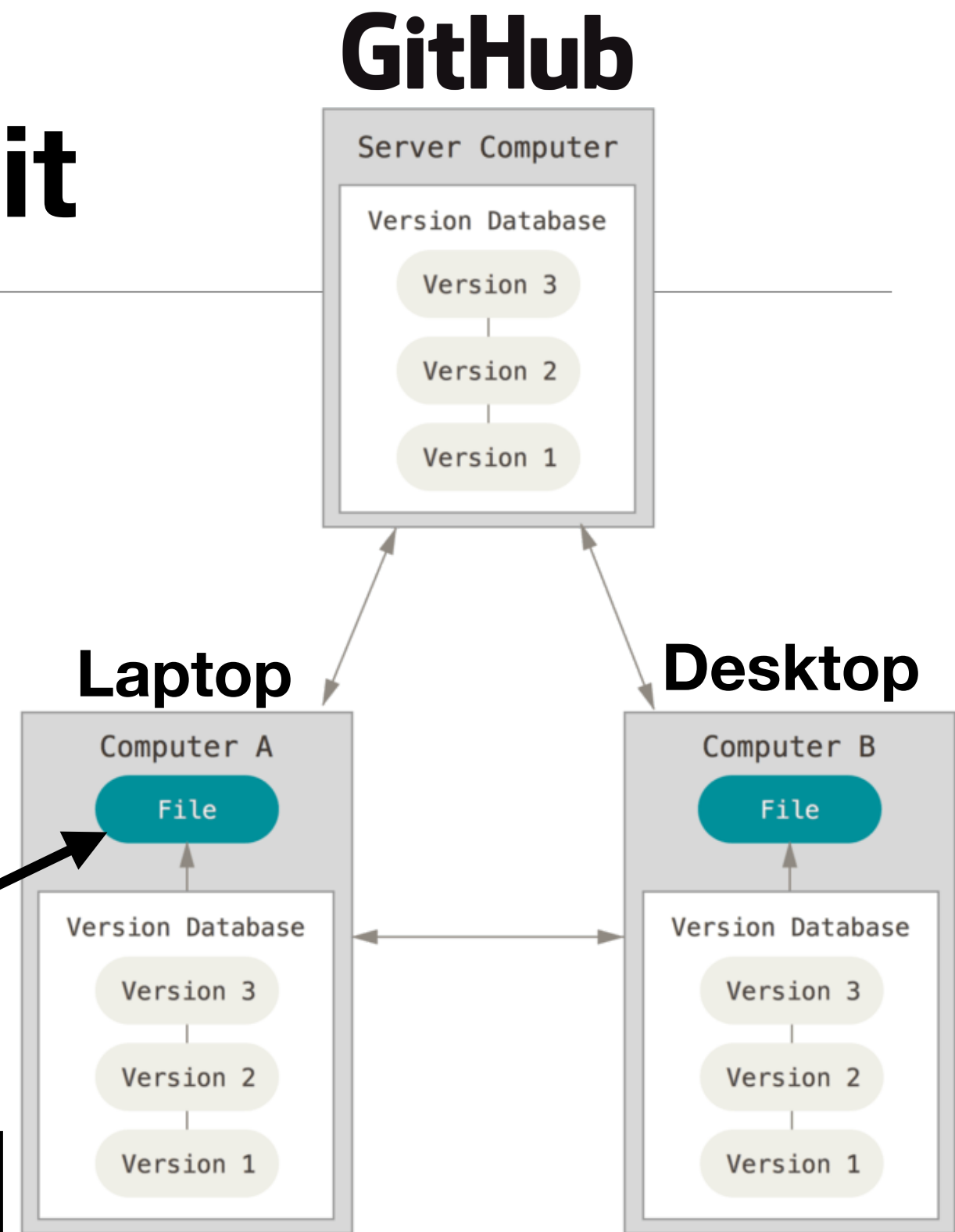


# Brief Primer on Git

```
$ ls  
my_awesome_script.jl  
my_awesome_script_20170110.jl  
my_awesome_script_bad_version.jl  
my_awesome_script_new_version.jl  
my_awesome_script_v1.jl  
my_awesome_script_v2.1.jl  
my_awesome_script_v2.jl
```

my\_awesome\_script.jl

Files are stored in a database that keeps track of your changes and is distributed across multiple devices and the cloud





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**Michael M. Bell**

mmbell

Block or report user

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 Fort Collins, CO

 [mmbell@colostate.edu](mailto:mmbell@colostate.edu)

 <http://bell.atmos.colostate.edu>

Overview

Repositories 9

Stars 12

Followers 8

Following 1

## Popular repositories


### DualPol\_simulator

A dual-polarimetric radar simulator for WRF output

 Julia ★ 4 🍴 2

### Doppler\_retrieval

Combined dynamic and thermodynamic retrieval from Doppler wind data

 FORTRAN ★ 3 🍴 1

### Airborne-Radar-QC

Quality control for airborne tail Doppler radar

 C++ ★ 2 🍴 1


### samurai

Spline Analysis at Mesoscale Utilizing Radar and Aircraft Instrumentation

 C++ ★ 2 🍴 3

### analyticAircraft

Software to generate analytic airborne Doppler radar data

 C++ ★ 2

### grid2ps

Postscript plotting package for gridded data

 FORTRAN ★ 1

Your GitHub page is a great way to advertise your work for graduate school or employers!

mmbell / lrose-core  
forked from NCAR/lrose-core

Watch 0 Star 0 Fork 3

Code Pull requests 0 Projects 0 Wiki Pulse Graphs Settings

Core C/C++ code for LROSE. <https://www.eol.ucar.edu/content/lida...> Edit

587 commits 1 branch 3 releases 2 contributors

Branch: master New pull request Create new file Upload files Find file Clone or download

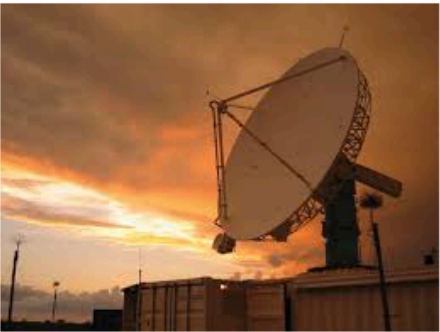
This branch is even with NCAR:master. Pull request Compare

mike-dixon apps/Radx/RadxPartRain: working on melting layer Latest commit 05378fc a day ago

build	exporting LROSE_INSTALL_DIR	2 months ago
codebase	apps/Radx/RadxPartRain: working on melting layer	a day ago
docs	Editing make docs	12 days ago
release_notes	adding-from-cvs	5 months ago
.gitignore	Merge branch 'master' of <a href="https://github.com/NCAR/lrose-core">https://github.com/NCAR/lrose-core</a>	5 days ago
LICENSE.txt	adding	5 months ago
README.md	Updating README	5 months ago

README.md

## lrose-core



### 🌹 - The Lidar Radar Open Software Environment

LROSE is a co-operative project between:

- Dept. of Atmospheric Science at Colorado State University (CSU) and the
- The Earth Observing Lab at the National Center for Atmospheric Research (NCAR).

LROSE is funded by the [National Science Foundation](#).

‘Fork’ a repo to contribute to development

‘Clone’ a repo to use it yourself locally

View your code and revision history

Use a pretty README file to document your project



# Beyond the Basics

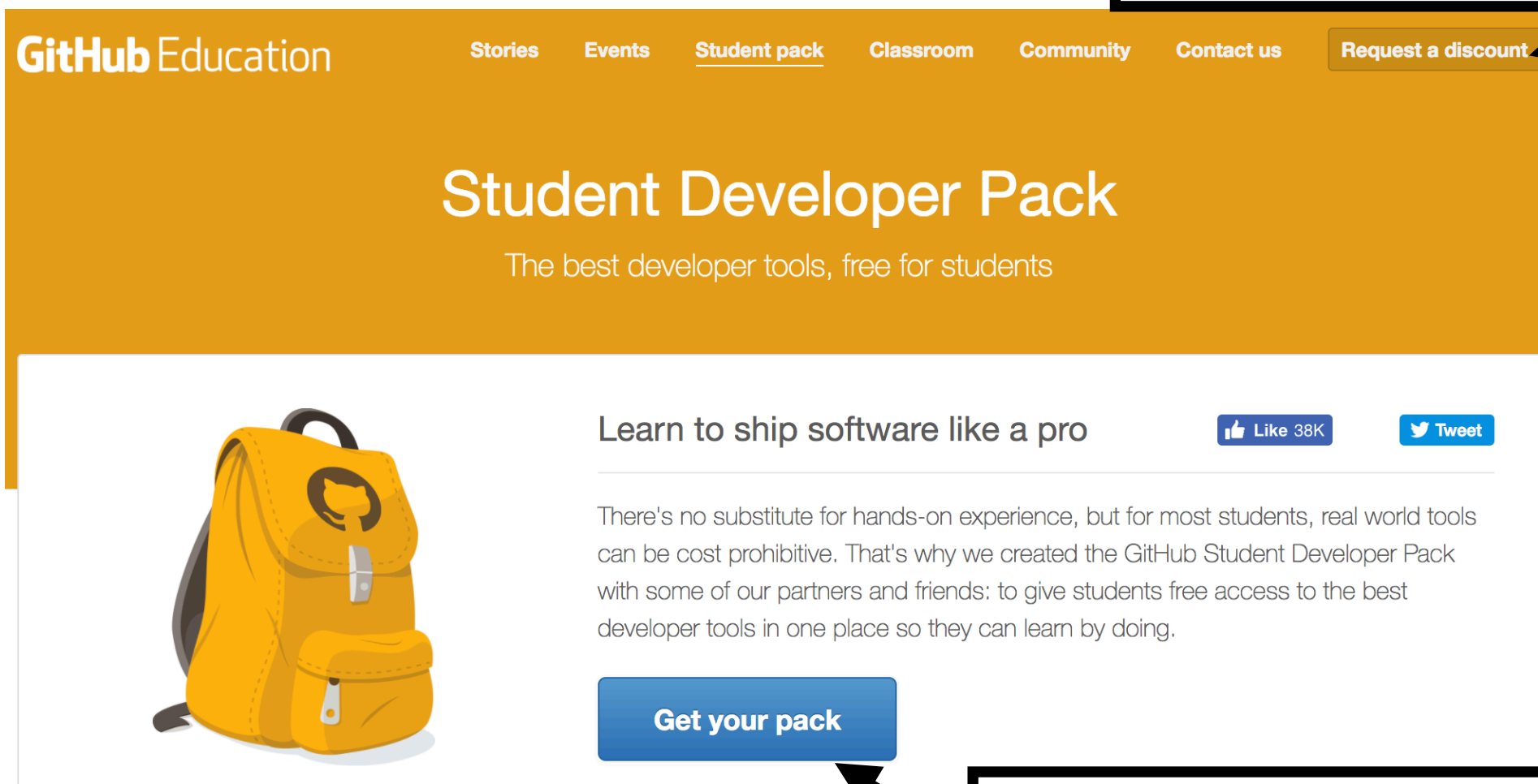
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- **Not just for code: great for LaTeX manuscript versioning and collaboration**
- **Use multiple branches to test new ideas without breaking your working code**
- **GitHub Desktop and GitKraken are great GUIs**
- **Feed your research back to the community as an open source project (maybe someone will help fix or improve your code!)**

# GitHub is **\*FREE\*** for students

<https://education.github.com/>

Request a free Personal plan  
to host private repositories



The screenshot shows the GitHub Education website. The top navigation bar is orange and contains the following links: GitHub Education, Stories, Events, Student pack, Classroom, Community, Contact us, and a button labeled "Request a discount". Below the navigation bar, the main heading is "Student Developer Pack" with the subtitle "The best developer tools, free for students". On the left side, there is an illustration of a yellow backpack with a GitHub logo. To the right of the backpack, the text reads "Learn to ship software like a pro" followed by "Like 38K" and "Tweet" buttons. Below this, a paragraph states: "There's no substitute for hands-on experience, but for most students, real world tools can be cost prohibitive. That's why we created the GitHub Student Developer Pack with some of our partners and friends: to give students free access to the best developer tools in one place so they can learn by doing." At the bottom of this section is a blue button labeled "Get your pack".

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## Student Developer Pack

The best developer tools, free for students

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