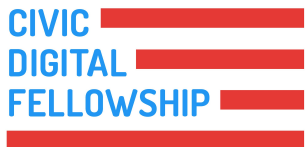


Making Great STRIDES This Fall

STRIDES Initiative (Center for Information Technology)

Nick Weber — Program Manager, STRIDES Initiative

Joel Peterson — Cloud Solutions Architect, STRIDES Initiative



Hadley Callaway
Columbia '21
Computer Science

Tiffany Duong
UIUC '22
Information Science

Overview

1. Introductions
2. What is STRIDES?
3. Laying the Groundwork for NIH-Wide GitHub Usage
4. Automating STRIDES Team Tasks
5. STRIDES Learning and Development

Introductions



Hadley Callaway
Columbia '21
Computer Science



Tiffany Duong
UIUC '22
Information Science

What is STRIDES?

What is STRIDES?

- Provides cost-effective access to industry-leading cloud partners (AWS and GCP) to help advance biomedical research
- Benefits of using STRIDES:
 - Discounts on STRIDES Initiative partner services
 - Professional services
 - Training
 - Potential collaborative engagements
- Strategic Plan for Data Science

STRIDES Initiative by the Numbers

18

NIH ICs
participating

50

Extramurals
participating

>2,700

People trained

\$10.4M

Cost savings to
ICs

\$51.5M

Obligated by NIH

338

Program/project
accounts onboarded

Where We Come In

- Team needed help on expanding in various areas
- What we worked on:
 - GitHub Enterprise Cloud
 - Automating STRIDES team tasks
 - Refining learning and development opportunities

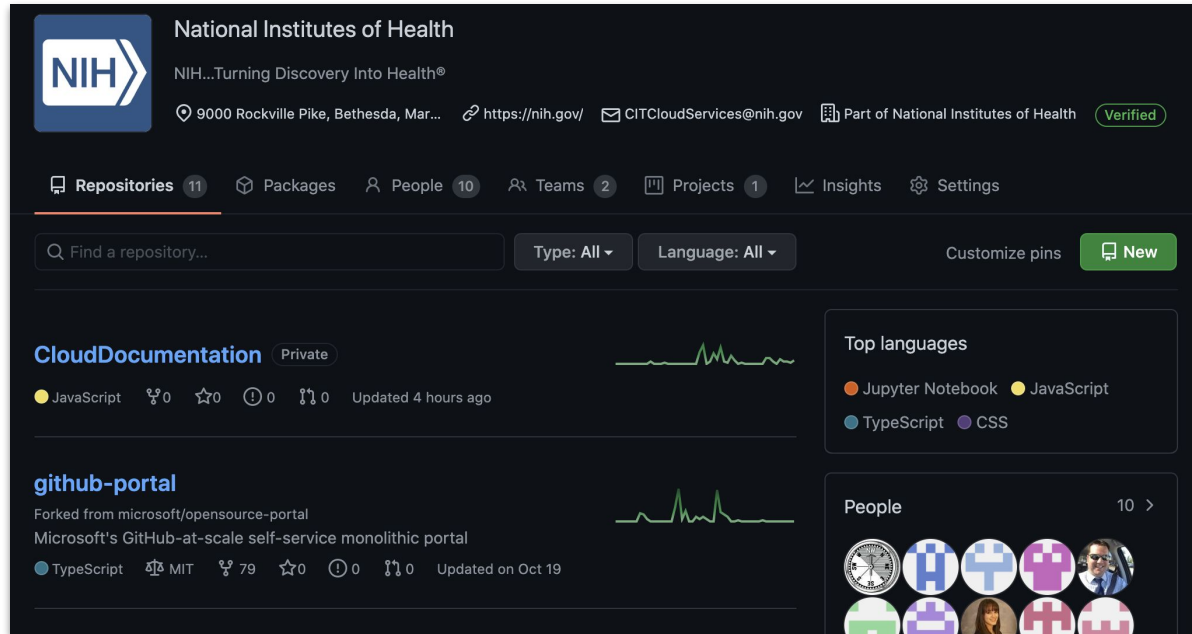
Laying the Groundwork for NIH-Wide GitHub Usage

STRIDES & GitHub

- STRIDES website hosted on GitHub Pages
- CIT handles NIH security breaches
 - ~\$250,000 from GitHub-related exposures forgiven
- Goal: **GitHub Enterprise Cloud NIH-wide**
 - Very popular in data science
 - Security features like single sign-on
 - Leverages Microsoft Enterprise Agreement



Our Initial Task



Automate GitHub Enterprise management
to prepare for thousands of users

Researching Version Control Patterns

- How might we build *with* our researchers and not *for* them?
- 22 interviews across 11 ICs
 - 15 interviewees using GitHub (free or paid)
- Common themes:
 - Scientist vs. engineer users
 - NIH/CIT structure
 - External collaboration
 - Positive feedback for GHEC

Making A Customer-Informed Proposal

- 11/18 presentation to Technical Implementation Working Group
 - 12/8 follow-up
- Made proposal for NIH-wide GHEC (complementing other version control usage)
- NEI and NINDS on boarded to GHEC as a result



Single sign-on to **National
Institutes of Health**

Authenticate your account by logging into
National Institutes of Health's single sign-on
provider.

Continue

Planning For Future Implementation Work

- Created implementation plan document for our team
- Assumes approval of NIH-wide GHEC plan
- Main points:
 - Increased awareness and education about GitHub
 - Finalized partnership with GitHub federal team
 - Continued onboarding of interested ICs + subsequent phased rollout
 - Automated GitHub Enterprise management

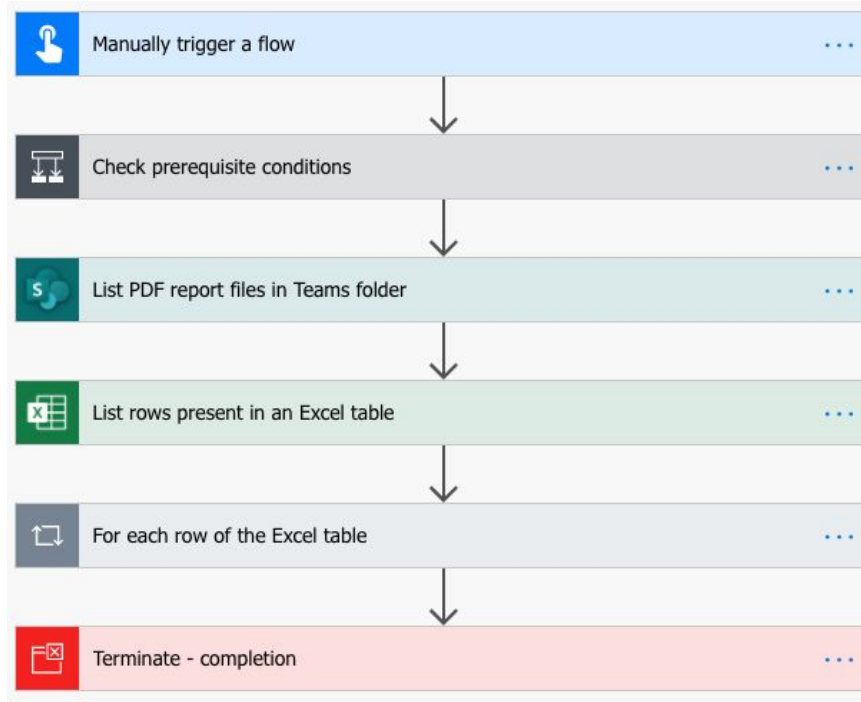
Automating STRIDES Team Tasks

Automating STRIDES Team Tasks

- Microsoft Power Automate
- Tedious, time-consuming tasks from team backlog
- Saved total of **30.75 workdays** per year

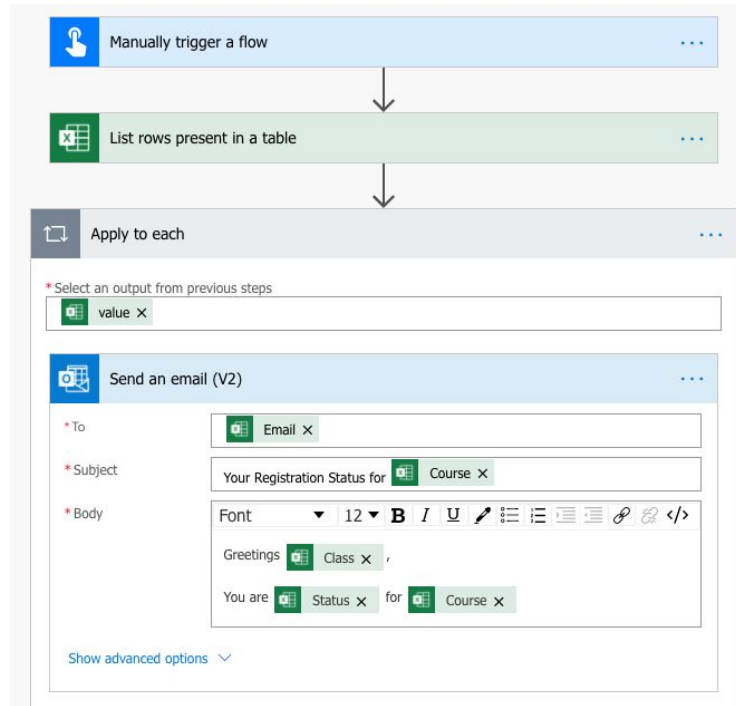


STRIDES Spending Reports



Saved **12 workdays** per year (3 days/month)

Cloud Training Confirmation Emails



Saved **18.75 workdays** per year (3 hours/week)

STRIDES Learning and Development

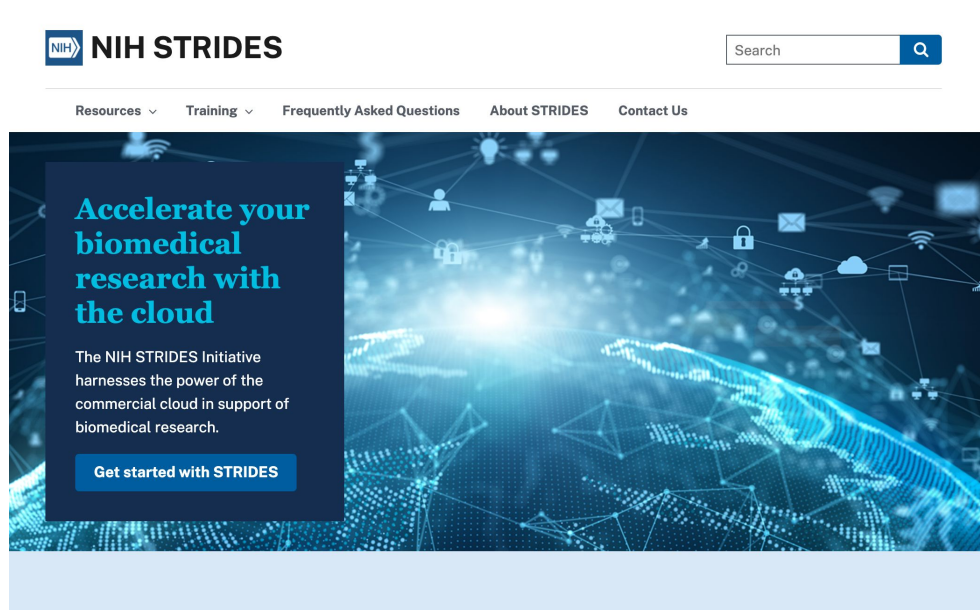
Working with Training

- Background: Training grew quickly from standard classroom sessions (Nov 2019) → tech talks, office hours, researcher-led seminar series, etc. (Present)
- My work: Taking a Product Management approach
- How might we better cater our training to our users — researchers at the NIH?
 - Interviewed multiple training users across the NIH + looked at surveys
 - Consolidated trainings by role and level
- **Bigger question:** How might we better cater our work to what our different users want and need?
 - In the Learning and Development sector
 - As well as in Client Services, Technology, beyond

Designing Personas

- Breaking down personas for all of the different types of people who would interface with biomedical research
 - Biological data scientist
 - Developer
 - Statistical geneticist
 - And more (e.g. administrators, security professionals, support staff)
- Thinking about what their needs are, what their pain points are
 - What kind of trainings or offerings would appeal to them

Bringing This Beyond: Website



STRIDES website designed by Bob and Annie (CDF Summer '20)

Thank you!

- **Nick Weber, Joel Peterson, Matt Gieseke**, and the rest of the STRIDES Team
- **Jess Mazerik** for supporting us and the other NIH Civic Digital Fellows
- **Rachel Dodell, Chris Kuang**, and **Ariana Soto** from Coding It Forward
- Mentors **Tom Dooner** and **Peggy Chau**
- All of the NIH employees we interviewed over the course of the fall!