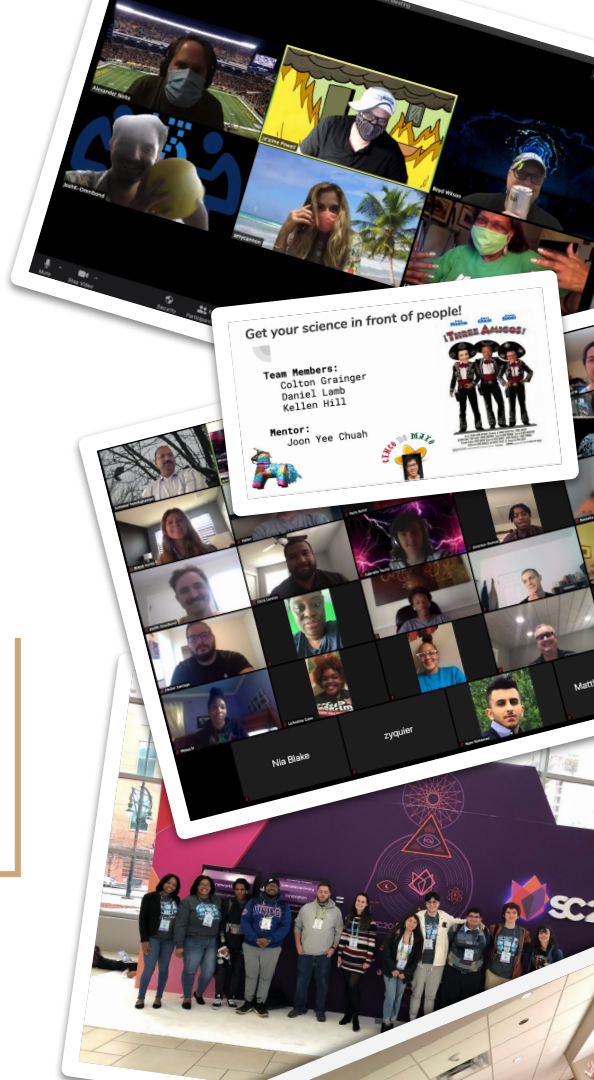
HPC in the City Slack and GitHub Training



SC20
Everywhere we are | more than hpc.

Agenda

- Introductions
- Hackathon Objective
- Deliverables and Resources
- General Information
- Slack Basic
- GitHub (Web) Basics

Presenter: Je'aime Powell

Organizers

Alex Nolte - *University of Tartu*
alexander.nolte@ut.ee

Boyd Wilson - *Omnibond*
boyd@omnibond.com

Amy Cannon - *Omnibond*
amycannon@omnibond.com

Je'aime Powell - *TACC*
jpowell@tacc.utexas.edu

Linda Hayden - *ECSU*
haydenl@mindspring.com

The Objective of HPC in the City

The hackathon aims to harness the resources, skills, and knowledge found in the HPC community in an effort to provide applied exposure towards the conference host city's local students from 2-4 year post-secondary educational institutions. In short, the hackathon will provide HPC skills and training while targeting problems that directly affect the participants.

- Develop an understanding of an Atlanta based issue through application of data analysis/presentation or management.

What you should expect to gain:

- Increased familiarity with data science in the cloud
- Experience collaborative software engineering
- Develop professional communication skills

Team Deliverables and Resources

Deliverables:

- **Source code Including Comments**
- **PDF of presentation**
  - Team members with pictures
  - Use of HPC technology in the project
  - Regional (Atlanta) implications of the project
- **Github Link**
  - README.md project description

Resources:

- Mentors/Specialists
- Slack (Ad-Hoc Communication)
- Google Cloud (Provided Credits)
- Cloudy Cluster
- Most Commonly Used:
  - Python
  - Jupyter Notebooks
  - Node.Js (JavaScript)
  - HTML
- Datasets (*Being Aggregated*)

General Information (the 3 T's)

- **Teams**
  - 4-5 Students
  - 1 Primary Mentor
  - 1 Specialist/Staff
- **Time (*Draft*)**
  - November 5th - 9th
    - 11/5@~6pm ET Event Start
      - Team formation
    - 11/[6-9] @ 11 ET & 6pm ET- Checkins
    - 11/9@6pm ET-Final Presentations
- **Topic Examples**
  - Data Analysis of COVID 19
  - Economic disparities and their effects on college participation
  - Genomics, Molecular Dynamics, or Weather Modeling in the Cloud.
  - Social Justice
  - Presidential Election
  - Public Data Management
  - Graduation Rates
  - Broadband Access
  - Insurance vs. Public Health Resilience

Communication Platforms

Slack - Basics

Hackathon Slack Team: Cloudhpchack.slack.com

Functions:

- Messages
  - Direct and Group
- Video Conference
  - Group
  - Screen share
- File Exchange

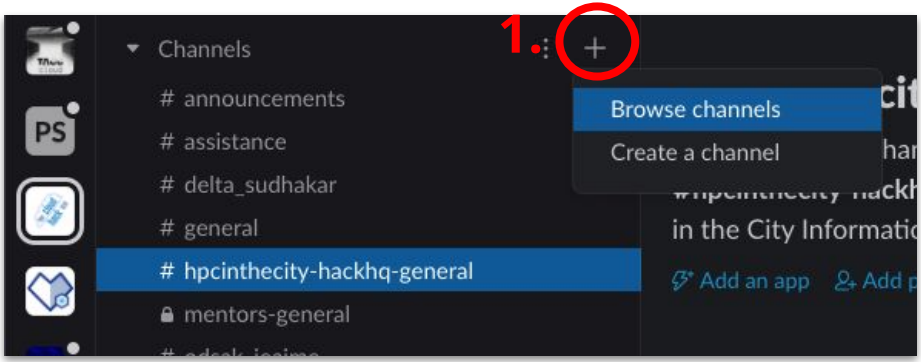
Slack Channels and Tips

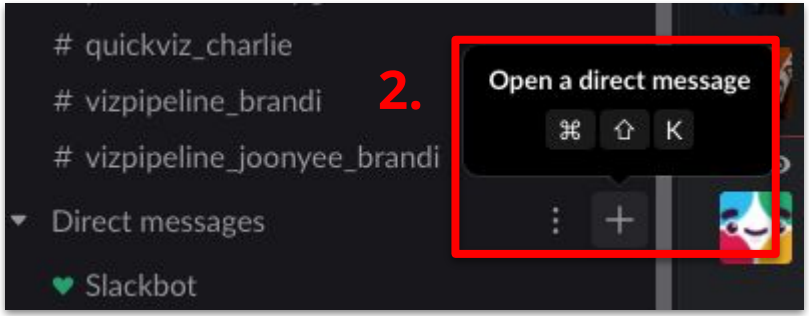
Important Channels

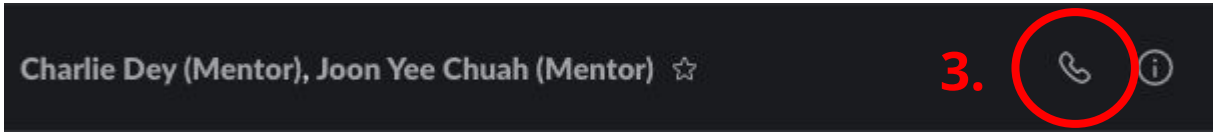
- #hpcinthecity-hackhq-general
- #assistance
- Custom team channel

Tips

1. Browse for a channel
2. Create Group
3. Conference

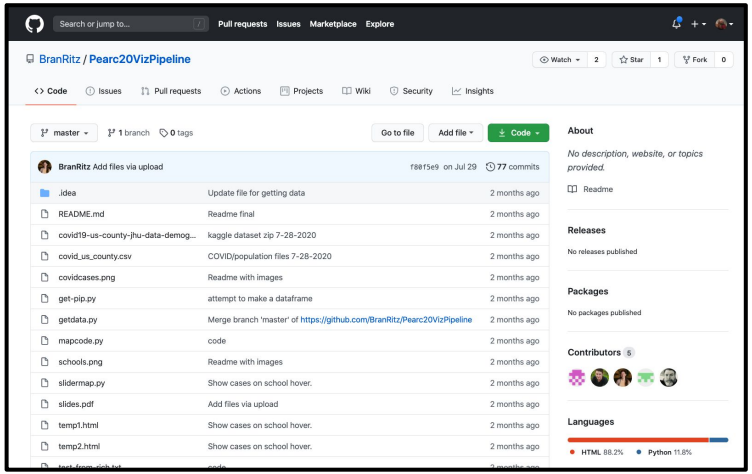


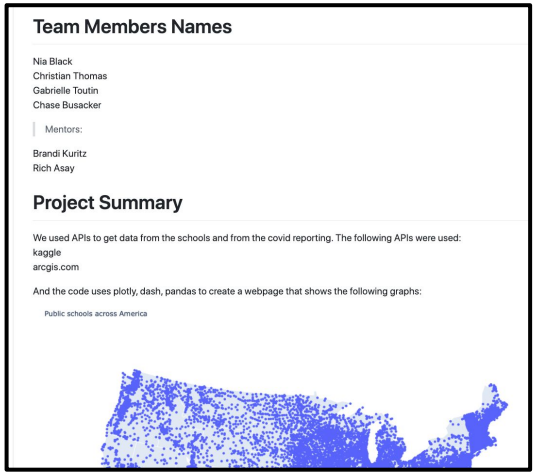




GitHub (Web) - Basics

Note: A GitHub repository will be required of all teams when reporting out during final presentations. (Examples http://hackhpc.org/pasthacks/)





Repository Creation and README.md

Demo Time!!

Questions and Concerns

Contact Information:

Je'aime Powell
(*HPC in the City Organizing Committee Member & TACC*)

Email: jpowell@tacc.utexas.edu

Twitter: @jeaimehp

HPC in the City Event Site: http://hackhpc.org/hpc/