





Google Cloud



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XSEDE

HPC in the City Project Overview and Data Science Training



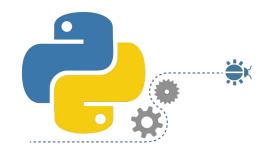
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## Agenda

- Introductions
- Hackathon Objective
- Deliverables and Resources
- General Information
- Project Overview
- Data Science Overview







#### Presenter: Je'aime Powell

### Organizers



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



Boyd Wilson - Omnibond boyd@omnibond.com



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Linda Hayden - ECSU

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## 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
  - $\circ$  Regional (Atlanta) implications of the project ullet

#### • 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



# 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



*Presenter:* Rich Asay

### Project Overview



**SC19** 

Denver, hpc CO is NOW. Super Messaging Solution 2 Cloudy Cluster Queue

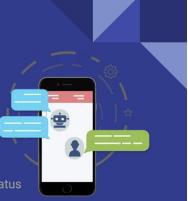
Christian R. Garcia, Avery Giles Breana Moreno, Cindy Yongoueth

Team SMS2CCQ

Mentor: David Reynolds

Project: CCQBot with Twilio

Goal: Use Twilio to build a chat bot that allows user to submit jobs and check status via text message

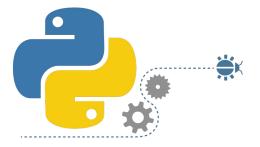




**HPC in the City** 

*Presenter:* Charlie Dey

### Data Science Overview





### Questions and Concerns

**Contact Information:** 

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