



HackHPC@ ADMII23 HACKATHON

JUNE 26TH - 29TH, 2023



SGX3
Extend. Expand. Exemplify.

SGCI
Science Gateways
Community Institute

TACC
Texas Advanced Computing Center



Kick-Off Session

<https://hackhpc.github.io/admi23>





Agenda

- Organizers
- Hackathon Objectives and Student Outcomes
- Code of Conduct
- Example Project Timeline
- Deliverables and Resources
- Awards
- Portal Pitches
- Team Creation

Join the
Slack
Workspace



<https://hackhpc.github.io/admi23>

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Organizers



Linda Hayden - ECSU/SGCI
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Amy Cannon - Omnibond
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Alex Nolte - University of Tartu
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Code of Conduct



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The Objective of HackHPC@ADMI23

This hackathon aims to harness the resources, skills, and knowledge found in the Science Gateways community in an effort to provide applied exposure towards students from 2-4 year post-secondary educational institutions. In short, the hackathon will provide skills and training while targeting problems that occur within the Science Gateways and Cyberinfrastructure community.

Student Outcomes

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



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Example Project Outline

Event Simplified Schedule

- **Monday, 6/26/23**
 - **Kick-Off**
 - Mentor Pitches & Team Formation
 - Afternoon - Team Introductions
- **Tuesday, 6/27/23**
 - Morning Checkin - Team Goals
 - Afternoon Checkin - Team Status
- **Wednesday, 6/28/23**
 - Morning Checkin - One-Day Progress
 - Afternoon Checkin - Status
- **Thursday, 6/29/23**
 - **Final Presentations**

~ 76 hrs Total Time
- ~7 hrs Planning / Checkins
- ~30 hrs Sleep/Rest
~59 hrs Work Time



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Deliverables and Resources

Deliverables:

- Source code Including Comments
- PDF of presentation and poster
 - Team members with pictures
 - Use of technology in the project
 - Project impact to the Science Gateways community
- Github Repository Link
 - README.md with project description

Resources:

- GitHub
- Omnibond Eureka
- Most Commonly Used
 - HTML/CSS/JavaScript
 - Python (Dash/Flask)
 - Jupyter Notebooks
 - GitHub Pages (Jekyll)
 - Repl.it (Collaborative Environment)
- Slack
SGCI/SGX3 Coding Institute 2023



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Awards and Judging Criteria

Awards

- Judges Choice Award
- Viewer's Choice Award
- Impact Award



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Awards and Judging Criteria

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Impact Award



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Portal Pitches



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HackHPC / OHA (HackHPC.org)

JOIN US FOR THE NEXT HACKATHON

Check back soon for more Hacks!
Follow us on [Twitter](#)

Stay Up To Date:
Join our [Discord](#)

INFORMATION

Hack-A-Thon
Hackathons are collaborative gatherings of people to learn and apply skills towards a particular problem in a defined amount of dedicated time. In the case of the Cloud HPC and SGX team hackathons, the participants are currently undergraduate/graduate students learned with mentors in the academic and/or commercial field that collaboratively identify a problem/issue and then both learn and apply skills to develop products that address their problem/issue.

In short, the hackathons aim to harness the resources, skills, and knowledge found in the HPC community in an effort to provide applied exposure for the student participants.

These issues can range from programmatic, to societal, to scientific subject areas. The mentors range from professors to programmers, to systems administrators, or even professionals in the HPC industry. Participant skill levels range from little to no programming nor systems experience to graduate students that are considered experts in their field. This mixture of experience levels provides direct interactions that increase the abilities of beginners while diversifying the skills of experts.

REGISTER

Are you thinking about participating in the next hackathon?



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ADMI23 HACKATHON

HackHPC/Open Horizons Alliance OHA

Pitch idea

Help recreate and fix any issues to

HackHpc/OHA website.

Using front end development

Purpose

★ To support driven learners to step foot in our Gateway and gain similar opportunities!

Programs to be Used:

- HTML
- Python
- Java Script



Je'aime Powell

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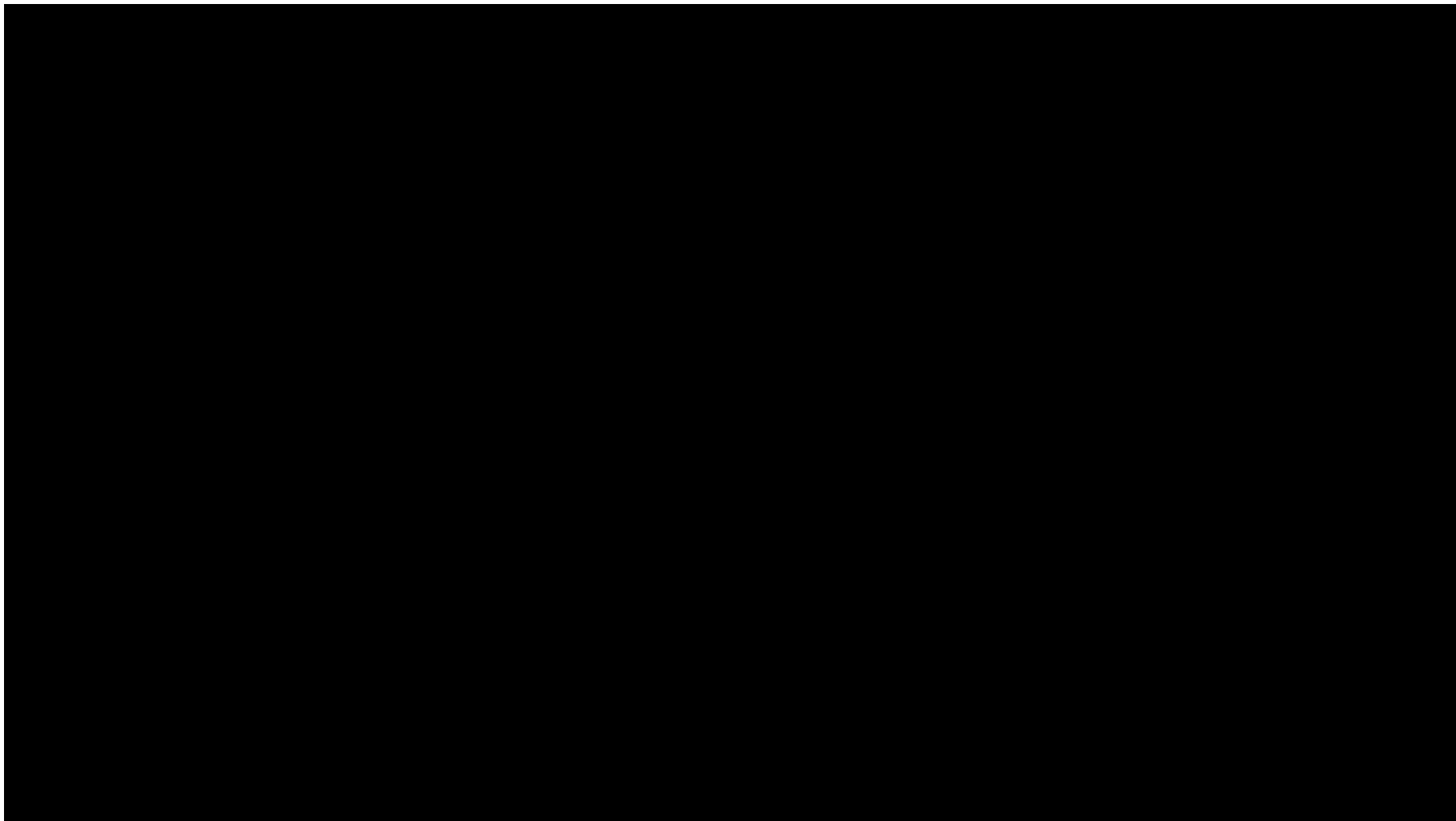
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ADMI (admiusa.org)



ASSOCIATION OF COMPUTER SCIENCE DEPARTMENTS AT MINORITY INSTITUTIONS

The Symposium on Computing at Minority Institutions

[Members Email Login](#)

What is ADMI?
The Association of Computer Science Departments at Minority Institutions (ADMI) was established as a national organization dedicated to exploring and providing remedies to the educational issues in computer/information science and computer engineering that confront minority institutions of higher education.

Perpetual Institutional Members

Elizabeth City State University	Hampton University
Mississippi Valley State University	Morehouse College
Norfolk State University	Winston Salem State University
Xavier University	


Institutional Members

Jackson State University	North Carolina Central University
Spelman College	University of North Carolina at Pembroke
University of the District of Columbia	

Affiliate Institutional Members

Auburn University

ADMI 2023
Symposium on Computing at Minority Institutions, Date: April 13-16, 2023, 2023 Computing for Social Good



Symposium includes:

- Current Perspectives on Machine Learning & Related Topics
- Student Papers & Oral Presentations
- Faculty Papers & Presentations
- HBCU Cybersecurity Competition
- HBCU Computer Science Olympiad Competition
- ADMI Symposium Social Media Competition
- Workshops
- Grad School/Career Fair

The purpose of ADMI is to serve as a forum through which members of computer and information science/engineering departments at minority institutions may:

- Exchange information and ideas for improving the quality and effectiveness of computer and information science/engineering education at minority institutions
- Identify and seek viable solutions to problems relevant to computer and information science/engineering education at minority institutions
- Communicate concerns and suggestions for the improvement of computer and information science/engineering education at minority institutions to appropriate organizations, agencies and groups
- Work for the continued development of excellence in teaching, state-of-the-art curriculum, research and equipment enhancement in computer and information science/engineering education at minority institutions
- Work for increased support in the continued professional advancement of faculty in computer and information science/engineering education at minority institutions
- Solicit and assist in the soliciting of funds for achieving the above stated objectives

How to Join ADMI
To join ADMI please download and complete the individual membership form and return it to ADMI. For institutions, please download and complete the institutional membership form and return it to ADMI.

Papers submitted to ADMI conferences must adhere to the ACM Proceedings format. Templates can be found at: <https://www.acm.org/publications/authors/submissions>.



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ADMI Website Reimagined

Dr. Alfred R. Watkins
VP of Information,
Association of Computer
Science Departments at
Minority Institutions (ADMI)



Agenda

Project Description

Helpful Skills to Have or to Hack





Introduction

- Alfred R. Watkins, PhD
- [ADMI Website Today](#)
- ADMI Website Reimagined

Project Description

ADMI Website Reimagined - How can you enhance the look, feel, and capabilities of the ADMI website with HPC tools? Ideas might include

- (1) adding a data repository for sharing Computer Science teaching modules and projects,
- (2) adding a data visualization to analyze ADMI symposium attendee data, or
- (3) incorporate Artificial Intelligence into the website experience.

Useful Skills to Have or to Hack

1. web development skills (HTML, CSS, Javascript, PHP, etc.)
2. database management (e.g. MySQL)
3. data visualization (e.g. Attendance statistics)
4. AI tools (e.g. ChatGPT)



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Team Formation

Next Session:

- Afternoon Checkin Team Introductions [6/26/23] 3:30pm ET

- 1-Slide/1-Minute with:
 - - Team Name
 - - Team Mentor(s)
 - - Team Members
 - - Team Zoom Virtual Background
 - - Team Theme Song

