

## HBCU Data Science Consortium (HBCU-DSC)

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### Project Summary

In alignment with the NSF South Big Data Innovation Hub program's goals of promoting collaboration and supporting the cross-pollination of tools, data, and ideas across disciplines and sectors, an HBCU Data Science Consortium (HBCU-DSC) has been developed. This Consortium works to provide an accessible and beneficial platform within the HBCU community that promotes collaboration and support the "cross-pollination" of data analysis tools, data, and ideas across the HBCU community, which is overwhelmingly located in the southern region. This initiative operates by adhering to the following structured 3-tiered approach:

- 1) Inaugural HBCU Data Science Workshop (Virtual) – held in February 2021
  - Conducted a meeting of interested HBCU data science, data analytics and business analytics researchers, professors, etc.
  - Began discussions around common curricula ideas for those pursuing degree development in data science, data analytics and/or business analytics
  - Developed focus groups (similar to "birds-of-a-feather" sessions for collaborative discussions, sharing of "best practices"
  - Launched the solicitation period of small project research min-grants awards designed to help participants potentially apply for small research grants (\$10,000 awards X 5 awards) to address seeding of research interests at their home institutions (these five awards were awarded in May 2021, to be implemented during the 2021 calendar year).
- 2) Launching of the Monthly Virtual "Data Science Salons" – beginning April 2021
  - Hosting of monthly virtual data science focused "Salons" - talks or sessions centered around themed topics of interest identified in the Inaugural HBCU DS Workshop
  - Identifying and nurturing potential research collaborations to be formed out of these sessions
  - Sharing knowledge by making "salons" open to ALL interested HBCU researchers, whether or not they are part of the consortium
- 3) Annual HBCU Data Science "Celebration" – to be held annually in January, beginning 2022
  - Will facilitate the sharing of results/outcomes of monthly "Salons"
  - Will include the presentation of results of small research grants (through poster sessions)
  - Discussion will continue around future grant funding opportunities, further collaborations, etc.

**Project Goals:**

1. To build a network of HBCU researchers focused on development of resources, collaborations and initiatives centered around data science
2. To increase possibility of securing funding and research awards in data science by HBCU Consortium members

**Project Objectives:**

1. To establish a clear definition of data science, data analytics, business analytics that is applicable to curricula at HBCUs
2. To develop a continual network of data science, data analytics and/or business analytics researchers at HBCUs for sharing of best practices, future collaborations
3. To develop a repository of resources (data sources, curricula and associated degree proposals), scholarly articles, etc), to be shared among the HBCU community for use in future research and collaborations

**Project Outcomes:**

1. Development of HBCU Data Science Network
2. Development of HBCU Data Science Repository
3. Increase in potential HBCU data science funding

**Sustainability Plan:**

The HBCU Data Science Consortium has filed for and established non-profit incorporation status (filed in the state of Georgia). The Consortium has moved to the establishment of partnerships and sponsorships for fundraising purposes, as well as the development of a donation structure, that will serve to sustain the project beyond the one-year grant period. Additional, the Consortium is pursuing additional grant funding from federal and state agencies, as well as private sources.

**Translation to Societal Impact:**

The short- and long-term impact of the HBCU Data Science Consortium can be measured according to the following activities:

1. Working to establish a more general definition of data science, data analytics and business analytics which can be used in academia as well as industry
2. Providing more direction for HBCU departments interested in developing degree programs in these areas
3. Developing of a repository of resources (project templates, curricula, industry contacts, student and faculty research opportunities, etc.) that can serve as foundation for HBCU research projects and increase opportunities for funding
4. Fostering the collaboration of HBCUs regionally and nationally for increased academic partnership and research initiatives
5. Building a strong concentration of academic, research and professional resources to include women and underrepresented minority students and faculty
6. Increasing the understanding of data science and related areas by HBCU faculty researchers thus providing improving in STEM education and strengthening of HBCU STEM programs as a whole