Tanganika Johnson, Ph.D.

Mentor 1: Mohammed Elmellouki -Mississippi Valley State University

Mentor 2: First Last Name - Affiliation

Home Institution: Southern University and A&M College

Target Course: Environmental Science

Target Course Number: 271

Anticipated Enrollment: 10-15

When and how frequently is this course offered? Spring or Fall Semester

Project Goals:

- Integrate an accessible science gateway and authentic South Louisiana datasets from **Designsafe** into the 16-week 271 course.
- Develop four scaffolded gateway activities using **Jupyter Notebook** that move students from data discovery and visualization to interpretation
- Support the Jaguar Environmental Resilience CURE on urban heat, tree canopy, stormwater, water quality, soil, or biodiversity by using **JetStream 2** through **ACCESS.**
- Create a reproducible workflow that ends with a research report, accessible poster, and community-facing environmental product.

Science Gateways Resource Needs/Questions:

- Which browser-based gateway best supports Louisiana environmental and geospatial datasets for beginning users?
- How can we provide reliable student accounts, data access, and a low-bandwidth backup for a class of 10-15?
- What resources and support are available to help adapt scaffolded notebooks for mapping, data visualization, basic statistics, and analysis of student-collected field data?
- What practices will make our Course-based Undergraduate Research Experiences (CUREs) accessible, reproducible, reusable, and sustainable for future course sections after the hackathon?