### **DaMADScience** Corps PI Federica Bianco UD CoPls: Jing Gao, Greg Dobler LU CoPI: Claude Tamez The DelAware And MiD-Atlantic Science Corps DSU CoPI: Hacene Boukari

A partnership between University of Delaware, Lincoln University, Delaware State University to establish an accessible, equitable program for Undergraduate Data Science education

A Multi-Institution Data Science educational program that is:

- Accessible to students of any background and prior STEM preparation
- Supports students' education and career goals across disciplines
- Provides job-ready skills including data-ethics training
- Builds capacity at HBCUs for Data Science pedagogy leveraging UD's existing resources
- Builds skills and frameworks for equitable education at UD and supports recruitment of diverse scholars

Each institution will lead the development of a topical advanced class tuned to the institution's scholarly interests and expertise Year 1 Geospatial Data Science Ψ Year 2 Image Analysis through AI Year 3 Time Series Analysis through the lens of Music UNIVERSITY UNIVERSITY THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION 1972





### Hands on hackathons & research internships 💓 Led by UD graduate students, offering undergraduate financial support

CODING STATS

# **Coding and Statistics**



## Bootcamps

Offered online asynchronously to level the playing field and ensure the program is accessible to all

### **Core class: Foundations of Data** Science for Everyone

Online synchronous class offered at all institutions jointly (currently implemented at LU + UD) From descriptive and inferential statistics to machine learning topics (clustering, random forest, neural networks)

### **Practical approach:**

- Real world data, coding in Python, the most market,

### Data Science Seminar

Offered synchronously at all three institutions simultaneously.

Teaching Data Ethics, Collaborative Skills, Cybersecurity, Visualizations & Communication in a discursive setting









sought after language in the data science job

 Cloud Computing on Google Colab notebooks Industry standard collaborative tools (GitHub) Industry standard communication platforms (Slack)

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