

Howard University Research Centers in Minority Institutions

Virtual Applied Data Science Training Institute - Spring 2024 Training Series

Session: Data Exploration and Visualization Using Power BI

Instructor: S. Tweneboah-Koduah, PhD (Ass. Professor, Computer Science) Gannon University Session

Leader: Dr. Anthony Tsetse (Associate Professor), Northern Kentucky University

Tuesday February 13 (11:00 am - 2 pm)

- A. Session Overview and Participants Expectations
- B. Overview of Data Science
- C. Short Break
- D. Introducing Data Exploration
- E. Access to Common (Open) Data Repositories

Thursday February 15 (11:00 am – 2:00 pm)

- A. Overview of Data Visualization
 - a. 1-Variable Graphs
 - b. 2-Variable Graphs
 - c. 3- and multivariable Graphs
- B. An Overview of Power BI
 - a. The parts of Power BI
 - b. Use of Power BI and roles
 - c. Power BI flow
 - d. Use Power BI
 - e. Building blocks of Power BI
 - f. Power BI Services
 - g. Power BI license

Tuesday February 20 (11:00 am – 2:00 pm)

- A. Importing Dataset and Modelling
 - a. Importing data into Power BI Desktop
 - b. Dealing with errors
 - c. 'Applied steps' in modelling data
- B. Building Visuals and Dashboards Using Power BI
 - a. Plotting
 - i. Visualization Panel
 - ii. Plot modifications
 - iii. Pages
 - b. Explore Marketplace for other visualizations
 - i. Filters
 - ii. Edit interactions
 - c. Saving and Exporting 39
 - i. Saving as pbix files
 - ii. Exporting and publishing report

Thursday February 22 (11:00 am – 2:00 pm)

- C. Presentations (Participants)
- D. Closing Session