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. Open Access to Common 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. Download and Installation
   b. The parts of Power BI
   c. Use of Power BI and roles
   d. Power BI flow
   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