COLERIDGE INITIATIVE

USDA United States Department of Agriculture

LEARN

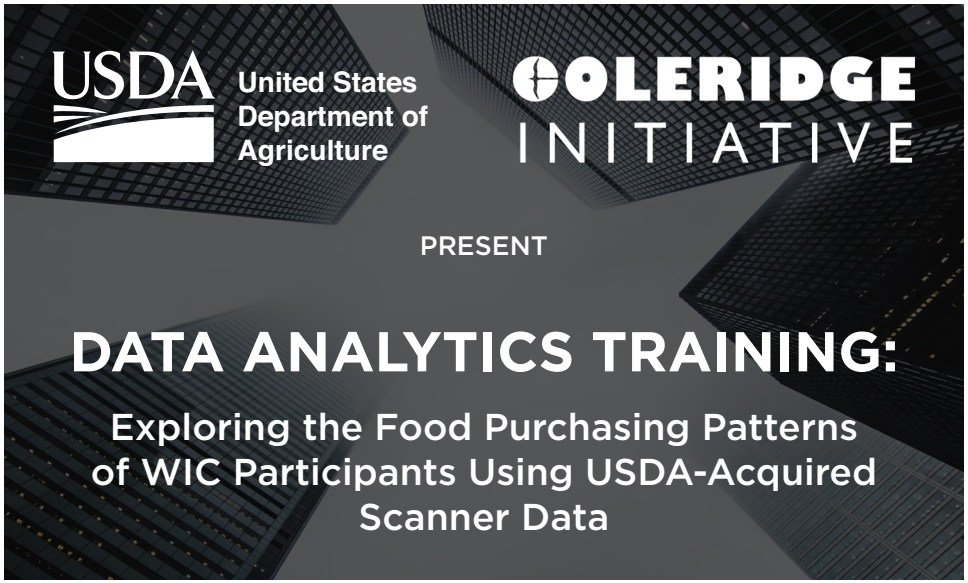
data analytics skills using best-in-class, open source tools

SOLVE

real-world problems using confidential micro-data

JOIN

our growing network of over 300 public sector employees



In-Person Week 1: October 30 - November 1

In-Person Week 2: November 20 - 22

Project Presentations: December 18

The Coleridge Initiative training program in Applied Data Analytics provides state-of-the-art perspectives and instruction on how to manage and analyze microdata to inform policy analysis and program operations. Leveraging the Coleridge Initiative, the USDA Economic Research Service seeks to empower individuals (including the public) of all skill levels to effectively use IRI Consumer Network and Infoscan scanner data that are obtained to examine food and agriculture issues of interest to Department. In particular, these data provide:

- Individual food items purchased by a longitudinal panel of roughly 120,000 households in the United States and household demographics (Consumer Network).
- Weekly sales of individual food items and business characteristics for roughly 60,000 retailers (Infoscan).
- Detailed characteristics on all food items purchased and sold.
- Medical information and prescription purchases for a subset of the Consumer Network panel

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USDA Applied Data Analytics: Fall 2019

The curriculum draws on best practices from both industry and government, including adherence to strict federal requirements on security and confidentiality. Skills taught include data linkage, visualization, and machine learning. Participants will be grouped in to teams of 5 or fewer people to design and conduct a research project using the IRI scanner data. Participants with their own data sources may have an opportunity to link their data to the IRI scanner data.

While participants will take away skills relevant to food and agriculture broadly, the course applies the curriculum to policy relevant questions in the USDA's Special Supplemental Nutritional Program for Women, Infants, and Children (WIC). The curriculum will provide templates for answering questions such as:

- What are WIC households' total food expenditures? What is the share of WIC purchases?
- Do WIC households purchase similar foods compared to households that do not participate in WIC but are eligible?
- What are the prices of nutritionally-eligible food products that are and are not WIC-approved in a given State?

Apply now at: https://coleridgeinitiative.org/training

Participants can take part in the training course at no cost, but are responsible for travel arrangements.

Program Overview

Activity	What	When	Time Required
Application (online/remote)	Online, example: here (incl. security requirements)	Register ASAP, complete by 10/18	About 2 hours total
Intro to SQL & Python (online/ remote)	Online videos with web-based content; weekly 1 hour group discussions	First online discussion week of 9/24	Up to 10 hours
Module 1 (in-person)	Introduce the program, data, and projects; includes data exploration, visualization, record linkage, and introduction to Machine Learning	10/30 - 11/1	3 days in DC area
Project Work (online/remote)	Self-paced project work with teams; instructors available for assistance	11/1 - 11/19	Up to 10 hours, suggest at least 2 hours per week
Module 2 (in-person)	Focus on projects with sessions on Inference and Confidentiality	11/20 - 11/22	3 days in DC area
Project Work (online/remote)	Complete team projects; recommend weekly check-in with instructors	11/23 - 12/17	Up to 10 hours, suggest at least 2 hours per week
Presentations (online/remote)	Present final projects via Webex	12/18	30 minutes per team; up to 3 hours

Activities Before the In-Person Training Program

Security Training Module

- Three 10-minute videos with a short quiz at the end of each video

Introduction to SQL and Python

- Four-week module of online videos and programming tutorials
- Once per week discussion session hosted online (via Zoom)