

# B2C2 Data and Methods

## Virtual Student Workshop

### WORKSHOP AGENDA

- **Introduction to Artificial Intelligence (9-9:50 am)**

This module will teach students with little or no knowledge of computer science to learn the basic concepts, terms, and applications of artificial intelligence (AI). Prerequisites: None

- **Introduction to Python Programming (10-10:50 am)**

This module will teach students with little or no programming background to learn Python programming with hands-on Jupyter notebooks on Google Colab. Prerequisites: None

- **Introduction to Machine Learning (11-11:50 am)**

This module will introduce the basic concepts and algorithms of machine learning and its power in solving real world problems. Prerequisites: None

- **Supervised Learning (1-1:50 pm)**

This module will do a deep dive on one of the main types of machine learning: supervised learning. Students will learn decision trees, k-nearest neighbors, and neural networks for exploring data sets with targets or labeled variables for different real-world applications. Prerequisites: Introduction to Artificial Intelligence, Introduction to Machine Learning

- **Unsupervised Learning (2-2:50 pm)**

This module will introduce students to the second main type of machine learning: unsupervised learning. Students will learn different clustering techniques for discovering insights from data sets that do not have a target or labeled variable. Prerequisites: Introduction to Artificial Intelligence, Introduction to Machine Learning

- **Data Analytics in Python (3-3:50 pm)**

This module will introduce simple data analytics capabilities in Python language. In this module, the students will get hands-on experience on Python packages (e.g., NumPy, scikit learn) to plug and play using Jupyter notebooks on Google Colab. Prerequisites: Introduction to Python Programming

**Saturday, 11/21**  
**9am - 4pm**

[Register here](#)

Join us and learn must-have skill (data analytics, Python coding, artificial intelligence, machine learning, and data-driven research) for today's students and researchers in a one-day workshop.

Free to ASU Students. Limited virtual seats. Early RSVP is highly recommended. After registering, you will receive a confirmation email containing information about joining the meeting.