Introduction to Data Analytics

The Introduction to Data Analytics workshop focuses on improving your understanding, appreciation and utilization of data analytics, as well as understanding its impact on work-related decisions.

This course will help you to become data aware -- to expand your knowledge and understanding of the properties of data, the strategies along with the common pitfalls in looking at data analytically, and the opportunities that can arise when considering data in new and novel ways. The primary objective of this workshop is to demonstrate how to better utilize the data you handle to make more informed and data driven decisions.

Course Topics

- Introduction to Big Data
- Big Data sources, collection methods and challenges
- Revisiting statistics
- The role of visualization in Big Data
- Introduction to Deep Learning
- Ethics and privacy issues in Big Data

Learning Objectives

- Acquire a working definition of Big Data and appreciate the different ways to gather, use and interpret data
- Use case studies to discuss the impact of data analytics on work-related decisions
- Practice with data exercises and selected applications to apply key concepts
- Discuss ethical and privacy considerations when collecting and using Big Data

Related Courses

- Introduction to Data Visualization
- Advanced Data Analytics

Max Kilger, Ph.D.

Kilger has extensive experience teaching and researching in the areas of big data, new research methodologies, relationship of people to digital technology, cybersecurity, social structure of the hacking community, and cyberterrorism. He has written and co-authored research articles and book chapters in the areas of influence in decision-making, the interaction of people with technology, motivations of malicious online actors, understanding the changing social structure of the computer hacking community and the nature of emerging cyberthreats. Kilger is a frequent national and international speaker to law enforcement, the intelligence community and military commands.