



## Data Analytics 101 with Python & Pandas

An introductory workshop for data analysis/science with Python Pandas library taught by instructors.

### What you'll learn:

- ❖ **Getting Started with Pandas**
  - Data Structures
  - Function Applications
  - Descriptive Statistics
- ❖ **Data Loading, Storage, and File Formats**
  - Reading and Writing in Text Format
  - JSON, XML, HTML Format
  - Interacting with Web APIs, Databases
- ❖ **Data Cleaning and Preparation**
  - Missing Data
  - Data Transformation, Manipulation
- ❖ **Data Wrangling: Join, Combine, and Reshape**
  - Hierarchical Indexing
  - Combine, Reshape, Pivot Datasets
- ❖ **Plotting and Visualization**
  - Matplotlib, Pandas, and Seaborn
  - Line, Bar, Histogram, Scatter, FacetGrid plots
- ❖ **Data Aggregation and Group Operations**
  - GroupBy, Pivot Tables, Cross-Tabulations