Lectures

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Statistical Programming

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1. **Algebra basics with NumPy [session 14]**

   - Why to learn Algebra
   - Scalars, vectors, matrices, tensors
   - Intro to NumPy
   - Operations with vectors and matrices

2. **Intro to pandas [session 15]**

   - Why to learn Pandas
   - Introduction to pandas
   - Series and DataFrames
   - Slicing, filtering, mapping, grouping
   - Practical uses of Pandas

3. **Dataframe manipulation [session 16]**

   - Why to learn Dataframe manipulation
   - Rearranging and reshaping
   - Join, merge, concat
   - Wide and long data
   - Practical uses of dataframe manipulation

4. **Intro to Statistics [session 17]**

   - Why to learn Statistics
   - Basic concepts
   - Probability
   - Distributions
   - Practical uses of Statistics

5. **Exploratory data analysis (EDA) [session 18]**

   - Why to learn EDA
   - Variables and Feature engineering
   - Dealing with missing data
   - Basic data analysis
   - Practical uses of EDA

6. **Data analysis case [session 19]**

   - Getting the data
   - Massaging the data
   - Analyzing the data
   - Providing insights