## Pandas Recap

**GA DAT5** 

https://pandas.pydata.org/pandas-docs/stable/api.html

## **Functions**

- 1. I/O for tabular files
  - a. df = pandas.read\_csv(filename, [options])
  - b. df.to\_csv(filename, index=False, [options])
- 2. Get overview of the data
  - a. df.info(): shape of data frame, columns descriptions, etc.
  - b. df.describe(): stats by columns
  - c. len(df)
  - d. df.head()
- 3. Select by rows and or columns with/without conditions
  - a. df['column\_name'] or df.column\_name : get column "column\_name"
  - b. df[0:10] : first 10 rows
  - c. df.loc[0:10, 'column\_name']
  - d. df[df["age"] >=21]

## **Functions**

- 4. Aggregate/sort by certain columns
  - a. df.groupby('column\_name"].mean()
  - b. df.sort\_values(by='column\_name', ascending=True): sort in descending order
- 5. Iterate over rows
  - a. Item\_iters = df.iter['column\_name'] -> item\_iters.next()
- 6. Operation between columns
  - a. df['column\_name1'] df['column\_name2']
- 7. Copy data frame
  - a.  $df_{copy} = df.copy()$