DATA SCIENCE WORKFLOW

IDENTIFY THE PROBLEM

Identify

- ☐ Identify business/product objectives
- ☐ Identify and hypothesize goals and criteria for success
- ☐ Create a set of questions for identifying correct data set

ACQUIRE THE DATA

Acquire

- ☐ Identify the "right" data set(s)
- ☐ Import data and set up local or remote data structure
- ☐ Determine most appropriate tools to work with data

PARSE THE DATA

Parse

- ☐ Read any documentation provided with the data
- ☐ Perform exploratory data analysis
- ☐ Verify the quality of the data

MINE THE DATA

Mine

- ☐ Determine sampling methodology and sample data
- ☐ Format, clean, slice, and combine data in Python
- ☐ Create necessary derived columns from the data (new data)

REFINE THE DATA

Refine

- ☐ Identify trends and outliers
- ☐ Apply descriptive and inferential statistics
- ☐ Document and transform data

BUILD A DATA MODEL

Build

- ☐ Select appropriate model
- ☐ Build model
- ☐ Evaluate and refine model

PRESENT THE RESULTS

Present

- ☐ Summarize findings with narrative, storytelling techniques
- ☐ Present limitations and assumptions of your analysis
- ☐ Identify follow up problems and questions for future analysis