

# Stats For Data Science Outline

## Week 1

### 1. Day 1:

- Slides: 01\_Introduction.to.Statistics.pdf
- Installing Anaconda

### 2. Day 2:

- Slides: 02\_What\_is\_Data.pdf
- Notebook: 01\_Exploratory\_Data\_Analysis\_Part\_1\_Single\_Variable.ipynb
- Exercise: 01\_Single-Variable\_EDA.txt

## Week 2

### 1. Day 1:

- Notebook: 02\_Exploratory\_Data\_Analysis-Part\_2\_Two\_Variable.ipynb
- Exercise: 02\_Multi-Variable\_EDA.txt

### 2. Day 2:

- Review Exercise 01
- Slides: 03\_Probability\_Part\_1\_Basics.to.Conditional.pdf

## Week 3

### 1. Day 1:

- Review Exercise 02
- Slides: 04\_Probability\_Part\_2\_Random\_Variables.pdf
- Notebook: 03\_Probability\_Calculations\_Part\_1\_Binomial\_Normal.ipynb
- Exercise: 03\_Probability.txt (Binomial and Normal Parts)

### 2. Day 2:

- Slides: 05\_Probability\_Part\_3\_Poisson.pdf
- Notebook: 04\_Probability\_Calculations\_Part\_2\_Poisson.ipynb
- Exercise: 03\_Probability.txt (Poisson and Exponential Parts)

## Week 4

### 1. Day 1:

- Review Exercise 03
- Slides: estimation\_01.pdf (contained in slides.tex folder)
- Notebook: Estimation\_Part\_1.ipynb
- Exercise: 04\_Confidence\_Intervals.txt

2. Day 2:

- Slides: estimation\_02.pdf (contained in slides.tex folder)
- Notebook: Estimation\_Part\_2.ipynb
- Exercise: 05\_Bootstrap\_Confidence\_Intervals.txt

## **Week 5** Hypothesis Testing - both classical and permutation tests

## **Week 6** Linear and Logistic Regression

1. Day 1:

- Slides: linear\_regression\_01.pdf (in slides.tex folder)

2. Day 2:

- Slides: logistic\_regression\_01.pdf (in slides.tex folder)