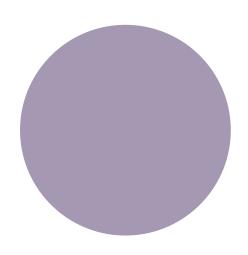
### Phase 2 Expectations

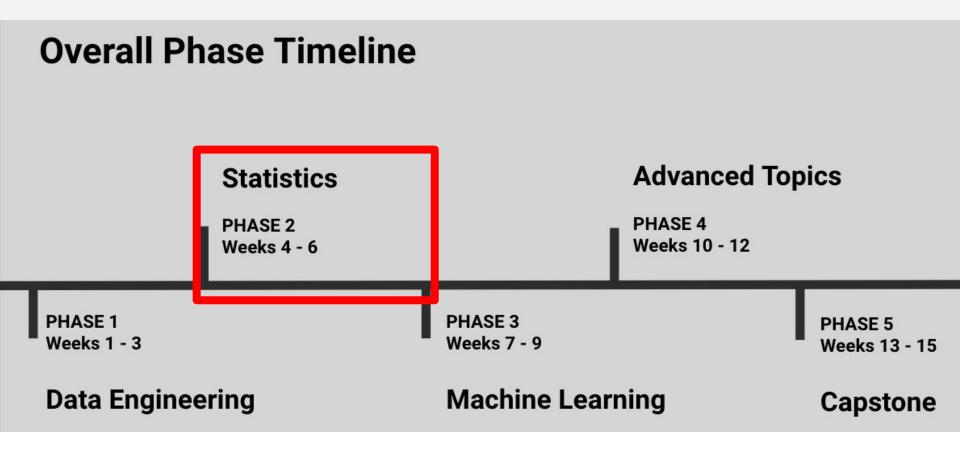


// FLATIRON SCHOOL

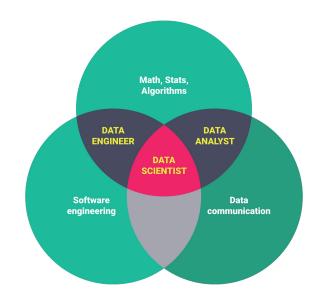
### Agenda



- 1. Phase 2: Overview
- 2. Week 1 & 2
- 3. What to Expect
- 4. Assignments and Code Challenge
- 5. Questions



# Why Statistics Matters



- Inference: Core DS Skill
- Framework of confidence
- Technical Interviews
- Solid foundation for ML





Josh Wills @josh wills



Data Scientist (n.): Person who is better at statistics than any software engineer and better at software engineering than any statistician.

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9:55 AM - 3 May 12

#### Fundamentals of Statistics $\Rightarrow$ Our First ML Models

#### WEEK 1

#### **Probability and Statistics**

- Set Theory and Probability
- Sampling
- Distributions
- Hypothesis Testing
- Statistical Significance
- z-Test, t-Test, ANOVA

#### WEEK 2

#### **Linear Regression Models**

- Correlations
- Simple Linear Regression
- R<sup>2</sup> and coefficients
- Assumptions of LR
- Multiple LR
- Transformations

## What to Expect: Phase 2



#### More Concepts Slightly Less Code

- Conceptual framework
- Formulas (memorization not required)
- Translate concepts to code

#### I DON'T Expect Immediate Understanding

- Especially with formulas
- Fill in as we progress
- Will revisit concepts

#### Complete Understanding Takes Years

- Advance degrees in mathematics/statistics
- Code Challenge focused on core concepts
- ❖ Building support structure for phase 3 + 4

#### What did we do well in Phase 1?



// FLATIRON SCHOOL

As Cohort	

As Instructor/Coach

#### What can we do better in Phase 2?



// FLATIRON SCHOOL

As Cohort		

As	Instructor/Coach
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## Assignments & Due Dates





#### Blog - Checkpoints - Code Challenge

CP - Wednesday 10/12

CP - Monday 10/17

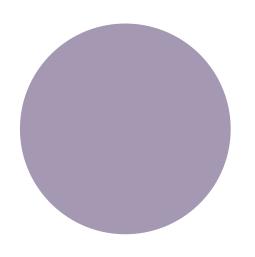
**BLOG - Tuesday 10/18** 

CP - Wednesday 10/19

CP - Thursday 10/20

CC - Friday 10/21

### Blog Post Phase 2



*Pick a data science tool/library/package* that you would like to learn more about, and write a blog post summarizing it. Examples could include things we have seen in class already or maybe a new one. If you have an alternative idea, run it by me first please. Potential elements to address:

- I. What problem is this tool/library designed to solve?
- II. How well does this tool/library solve that problem?
- II. What are the main alternatives or competitors to this tool/library?
- IV. Who originally made, and who currently maintains, this tool/library?
- V. Links to documentation and/or tutorials for this tool/library
- VI. Links to examples of projects or blog posts that use this tool/library

# Questions, Thoughts, Comments?

