Distributions, Simulation, and Hypothesis Testing

PROFESSIONAL & CONTINUING EDUCATION
UNIVERSITY of WASHINGTON

Review

- Counts and combinatorics
  - N! ways to order N things
  - Combinations – order does not matter
  - Permutations – care about order
- Probability
  - Axioms of probability
  - Set operations – union, intersection, negation
  - Independence: P(A and B) = P(A) P(B)
  - Mutually exclusive events
  - Conditional probability: P(A|B)

Schedule

Part 1	Part 2	Part 3	Part 4
Lesson 1 Data Exploration 1	**Lesson 3** Combinatorics	**Lesson 6** Intro to Regression	**Lesson 9** Näive Bayes
Lesson 2 Data Exploration 2	**Lesson 4** Hypothesis Testing	**Lesson 7** Regularization	**Lesson 10** Basic Text Analysis
Milestone 1 Data Visualization	**Lesson 5** Intro to Bayes	**Lesson 8** Time Series Analysis	**Milestone 4** Independent Project
	Milestone 2 Hypothesis Sim	**Milestone 3** Regression Models	

Reminders!

- Milestone 01 is due tonight!
- Quiz 04 must be completed by February 3
- Discussion 04 must be completed by February 3
- Assignment 03 is **due February 4! – simulation**
- Assignment 04 likely delayed