JOHNS HOPKINS UNIVERSITY

Overview

Week 1

Week 2

Week 3

Week 4

Grades

Notes

Discussion Forums

Messages

Course Info

Week 1

Statistical Inference

Week 1

Discuss and ask questions about Week 1.

657 threads · Last post a month ago

[Go to forum]

Week 1: Probability & Expected Values

This week, we'll focus on the fundamentals including probability, random variables, expectations and more.

Module 1: Introduction

▶ **Video:** Introductory video 7 min   [Resume]

▤ **Reading:** Welcome to Statistical Inference 10 min

▤ **Reading:** Some introductory comments 10 min

▤ **Reading:** Pre-Course Survey 10 min

▤ **Reading:** Syllabus 10 min

▤ **Reading:** Course Book: Statistical Inference for Data Science 10 min

▤ **Reading:** Data Science Specialization Community Site 10 min

▤ **Reading:** Homework Problems 10 min

Module 2: Probability

▤ **Reading:** Probability 10 min

▶ **Video:** 02 01 Introduction to probability 6 min

▶ **Video:** 02 02 Probability mass functions 7 min

▶ **Video:** 02 03 Probability density functions 13 min

Module 3: Conditional Probability

▤ **Reading:** Conditional probability 10 min

▶ **Video:** 03 01 Conditional Probability 3 min

▶ **Video:** 03 02 Bayes' rule 7 min

▶ **Video:** 03 03 Independence 3 min

Module 4: Expected Values

▤ **Reading:** Expected values 10 min

▶ **Video:** 04 01 Expected values 5 min

▶ **Video:** 04 02 Expected values, simple examples 2 min

▶ **Video:** 04 03 Expected values for PDFs 7 min

Practical R Exercises in swirl

Reading: Practical R Exercises in swirl 1 10 min

Practice Programming Assignment: swirl Lesson 1: Introduction 3h

Practice Programming Assignment: swirl Lesson 2: Probability1 3h

Practice Programming Assignment: swirl Lesson 3: Probability2 3h

Practice Programming Assignment: swirl Lesson 4: ConditionalProbability 3h

Practice Programming Assignment: swirl Lesson 5: Expectations 3h

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Week 1 Quiz

Quiz: Quiz 1 6 questions Due Sep 21, 1:59 AM CDT