Introduction to Statistics

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Introduction to Statistics

Overview

This resource is intended to provide an introduction to the basics of statistics.

Contents

- Introduction
- Data Types and Levels of Measurement
- Describing Data
- Comparing Data
- Data Visualisation
- Correlation
- Sampling
- Confidence Intervals
- Hypothesis Testing
- Statistical Significance
- Odds against Chance Fallacy
- Statistical Significance Verses Importance

Chapter 1

Introduction

1.1 What is Statistics?

Statistics is all about the collection, organization, analysis, interpretation and presentation of data. Statistics is used everywhere from opinion polling in politics to predicting the prices of assets. There are two main branches of statistics: descriptive statistics and inferential statistics.

1.2 Descriptive Statistics

Descriptive statistics describes or summarises data that have been collected. Measures of central tendency and measures of dispersion are the most important tools.

1.3 Inferential Statistics

Inferential statistical is used to make prediction about a population using information gathered about a sample. Inferential statistics involves hypothesis testing and regression analysis.

Chapter 2

Data Types

Chapter 3

Applications

Some *significant* applications are demonstrated in this chapter.

3.1 Example one

3.2 Example two

Chapter 4

Methods

We describe our methods in this chapter.

Chapter 5

Final Words

We have finished a nice book.