1. Objectives

1. Recall the statements of the **(strong/weak) law of large numbers** and the **central limit theorem** and know to apply these for large sample sizes.

2. Apply **Hoeffding's inequality** to the sample means of bounded i.i.d. random variables.

3. Recall the probability density function and properties of the **Gaussian distribution** .

4. Use **Gaussian probability tables** to obtain probabilities and **quantiles** .

5. Distinguish between **convergence almost surely** , **convergence in probability** and **convergence in distribution** , understand that these notions are from strongest to weakest.

6. Determine convergence of sums and products of sequences that converge almost surely or in probability.

7. Apply **Slutsky theorem** to the sum and product of a sequence that converges in distribution and and another that converges in probability to a constant.

8. Use **continuous mapping theorem** to determine convergence of sequences of a function of random variables.

讨论

显示讨论

主题： Unit 1 Introduction to statistics:Lecture 2: Probability Redux / 1. Objectives

认证证书是什么?