

Assignment 4 – Statistical Analysis (MAX 5 pages)

Assignment 4 is due March 16 (Monday), 2015 at 8.00am

Perform statistical analysis of the data from the inspection experiment. The data is available in the associated pdf file called 'Raw_Data.pdf'. Consult the lecture slides from L9 – Introduction to statistics. The file 'Experiment_Design.pdf' contains the purpose statement, research questions, hypothesis, and methodology. Use this information when selecting tests, how to interpret the data (e.g. does your result means we can reject the null hypotheses or not).

You should choose which statistical tests to use, why these are the most suitable test to use in this particular case, perform the tests and interpret data result, what does it mean? What does the result says?

Please Note! For this assignment, we assume that all found faults are correctly identified. You are ALLOWED to add new hypotheses (must keep the ones in the design document), perform other calculations (if you find it appropriate). You must decide how to deal with all NA (not answered) in the raw data file and explain why and how you dealt with it in the report.

The Report

The report must have the following sections and content. It must be formatted using the IEEE Conference Proceedings format (available on the course homepage).

1. Introduction

- Statement of the problem and why it is important (copy paste from the file 'Experiment_Design.pdf' file)

2. Purpose of the study

- Purpose statement (copy paste from the file 'Experiment_Design.pdf' file)
- Research Questions (copy paste from the file 'Experiment_Design.pdf' file)
- Hypothesis (copy paste from the file 'Experiment_Design.pdf' file)

3. Methodology

- Method(s) for analyzing the data (Statistical analysis)
- Motivation of why these statistical tests where used

4. Results

- Report the results
- Discuss what does the result means, how do we interpret it

Acknowledgement

- Write who is responsible for what part