Data Science

Home Work 1.

1. State the Data Science Work of Jeff Hammerbacher’s Model.
2. State the three basic principles in design of experiment. Explain how and why to use them.
3. Practice the data set DS\_HW1\_R\_and\_R\_data.xlsx.

Use ANOVA to analyze the factor effects of Inspector and Part. Each treatment has 3 replicates (tests). Explain the analysis results for all the following questions, including the ANOVA table and the test results.

1. Give the ANOVA table with the interaction effect.
2. Are Inspector and Part the significant factors for impedance? Why?
3. Is there an interaction effect between Inspector and Part to the impedance? Why?
4. Exam the data for model assumptions.

Upload the DS\_HW1\_yourname.docx (include all your answers and codes) to MOODEL before 9/26 22:00.