MSDS 7333: Quantifying the World

Case Study 4: Change Point Detection and Nonparametric Regression

Rubric

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| --- | --- | --- |
|  | Total Points | Points Awarded & Comments |
| Case study Total Points |  | |
| Abstract | 5 | This gives a very short overview of the document including a general description of the problem and notable take-away messages. |
| Introduction | 5 | What is the overall goal of your investigation? Why is it important? |
| Background: brief background of data set, nonparametric regression (and when it might be useful), and change point detection (and when it might be useful),. | 10 | Explain the data and what you are going to do. Explain the general concepts of nonparametric regression and change point detection. Note, though non-parametric regression can be used for changepoint detection, they aren’t the same thing |
| Methods: What did you do? Why did you do it? Always be mindful of how it relates to the objectives outlined in the Introduction/Background. | 30 | Be thorough! |
| Results: This is where you compile the evidence for your conclusion. Describe any plots or tables. | 30 |  |
| Conclusion: summarize the main outcome(s) of from the results | 5 | What lessons will you take with you after this examination? |
| grammar & organization   1. Spelling/typographical errors 2. Paper structured as given in template 3. Smooth transitions between sections | 5 |  |
| bibliography & Citations: conform to standard format and are consistent | 5 | we can work on this as the semester goes on. attempt to do it, but don’t worry overmuch about it right now. |
| Code: Attached as a separate file. | 5 | Be sure it is clean and commented |