

Case Study Rubric

Due: TBD

Submission format: upload pdf and link to github repo to Canvas

General Description: Submit to Canvas your pdf and link to repository

Why am I doing this? This study is an opportunity to showcase your technical as well as conceptual skills in a unified project. The case study will represent a hands-on scenario similar to one you may be presented in academic courses or in a professional environment.

What am I going to do? At this point, you have likely accumulated a variety of technical and conceptual skills in data science. You will now have the opportunity to combine and express these skills in an independently-driven case study. You will ultimately provide a deliverable that covers all requirements, including significant results and conclusions. The deliverable will include:

- Written portion PDF - along with reference page
- GitHub repository - containing code and necessary data

How will I know I have succeeded? You will meet expectations on this case study when you follow the criteria in the rubric below.

<u>Category</u>	<u>Details</u>
Formatting	<p>Submit each component listed in the rest of this rubric as advised below.</p> <ul style="list-style-type: none">• Written Portion<ul style="list-style-type: none">○ Submit the written portion as a PDF file.• Data & Code<ul style="list-style-type: none">○ Submit code created for all portions in a GitHub repository.○ Include any additional data that was used in GitHub if necessary.○ The GitHub should be titled “CS-[insert first & last name]”• References<ul style="list-style-type: none">○ References should be included on a separate page at the end of the Written Portion PDF file.○ IEEE citation style
Written Portion	<p>Discuss your interpretation of the study and thought process by answering the questions below.</p> <ul style="list-style-type: none">• In a small paragraph, summarize the problem presented in the study as well as its importance.• In a small paragraph, discuss your plan to meet the demands of the deliverable.<ul style="list-style-type: none">○ Include a simple graphic that outlines your analysis

	<p>plan that you will follow for this study.</p> <ul style="list-style-type: none"> Finally, discuss the results of your study in complete sentences as well as the significance of these results in the greater context. <p>Reflection:</p> <ul style="list-style-type: none"> In a small paragraph, discuss the challenges you met while completing this study and how you overcame them. <ul style="list-style-type: none"> Also discuss what you could have done differently and how you plan to improve in the future.
Code	<p>Your code should include...</p> <ul style="list-style-type: none"> An exploratory data analysis with respect to happiness scores and 6 life evaluation factors. <ul style="list-style-type: none"> Factors: GDP, life expectancy, social support, generosity, corruption, freedom A time-series regression analysis and model <ul style="list-style-type: none"> The model should be trained and tested on the provided cleaned dataset. <ul style="list-style-type: none"> Use dataset WHR.csv Located in "DATA" folder on GitHub The model should then be used on the data from year 2022 to predict the happiness scores for 2022. <ul style="list-style-type: none"> Retrieve 2022 data from WHR data.xls dataset Located in "DATA" folder on GitHub Be sure to include comments so a viewer can understand your process.
References	<ul style="list-style-type: none"> At the end of the written portion of this assignment please include a list of references in IEEE citation style that were NOT in the already given reference materials.