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| **Criteria** | **Low** | **Medium** | **High** | **Exemplary** | **Total** |
| **Problem Framing** | **0-15 points** | **14-16 points** | **17-18 points** | **19-20 points** | /20 |
| Problem or is not clearly defined and/or the paper lacks focus throughout | Identifies a problem but may be too broad in scope or is somewhat unclear and needs to be developed further. The focus is not consistently maintained throughout the paper. The framing of this problem in terms of analysis is unclear. | Identifies a relevant problem that provides adequate direction for the work with some degree of interest for the reader. Some details of the problem may be unclear. | Identifies a relevant problem that provides direction for the work. Excellent and compelling explanation of how the problem is relevant and how it maps to the analysis. The problem is consistently the focal point throughout the paper. |
| **Data Cleaning, Analysis and Modeling** | **0-22 points** | **21-23 points** | **24-26 points** | **27-30 points** | /30 |
| Very limited or inappropriate modeling techniques..  Does not conduct reasonable data cleaning and missing value strategies.  No or incorrect hyperparameter tuning.  Models are not correctly validated.  Lack of discussion of the pros and cons of the various approaches. | Effectively tests few applicable modeling and analytical techniques with a few errors.  Limited reasonable data cleaning and missing value strategies.  No or incorrect hyperparameters.  Models are not validated with respect to the business problem  Very limited discussion of the pros and cons of the various approaches. | Effectively tests few applicable modeling and analytical techniques.  Conducts reasonable data cleaning and missing value strategies.  Appropriately tests some relevant hyperparameters.  Models are mostly validated with respect to the business problem.  Provides some discussion of the pros and cons of the various approaches. | Effectively tests at least 4 applicable modeling and analytical techniques.  Test multiple and thorough data cleaning and missing value strategies.  Appropriately tests all relevant hyperparameters.  Models are appropriately validated with respect to the business problem.  Provides outstanding discussion of the pros and cons of the various approaches. |
| **EDA and Data Acquisition** | **0-22 points** | **21-23 points** | **24-26 points** | **27-30 points** | /30 |
| External data sources not leveraged or severely lacking. Value of these with respect to the business problem is not identified.  Very limited or incorrect EDA. | Leverages some external data sources, but with limited effectiveness. Limited ability to measure in business terms the value of these data sets to their business problem.  Conducts limited or incorrect EDA with some commentary. | Identifies 1-2 reasonable external data sources. Measures in business terms the value of these data sets to their business problem.  Conducts some reasonable EDA with reasonably relevant commentary.  Most graphs are visually appealing. Some components may be missing or difficult to interpret. Most graphs are of publication quality, with one or two exceptions. | Acquires 2-3 compelling external data sources. Measures precisely in business terms the value of these data sets to their business problem.  Conducts exhaustive and thorough EDA with excellent and relevant commentary.  All graphs are visually appealing, with all axis having titles, an appropriate title for the graph, the proper graph type chosen and are of publication quality and formating. |

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| **Presentation** | **0-9 points** | **10-12 points** | **13 points** | **14-15 points** | /15 |
| Presentation is is not organized. Flow is erratic.  Slides and graphics are unacceptable.  Key components are missing. Demo of tool or deployed model is not present.  Speakers present with limited effectiveness and not in a professional manner. | Presentation is somewhat organized. Flow may be a bit erratic.  Slides and graphics have key gaps and/or are unclear.  Includes most required components but missing some key items. Demo of tool or deployed model fails or is simplistic.  Speakers present with limited effectiveness and in a somewhat professional manner. | Presentation is adequately organized. Ideas are arranged logically, flow smoothly, with some progression of thought.  Slides and graphics are mostly appealing and convey the general theme.  Includes most required components. Demo of deployed model or tool is conducted effectively.  Most speakers present effectively and in a highly professional manner. | Presentation is effectively organized. Ideas are arranged logically, flow smoothly, with a strong progression of thought.  Slides and graphics are visually appealing and convey the point.  Includes all required components. Demo of deployed model or tool is extremely impressive.  All speakers present effectively and in a highly professional manner. |

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| **Code Quality** | **0-2 points** | **3 points** | **4 points** | **5 points** | /5 |
| Code is not all stored in a documented and accessible Github repo.  Improper usage of version control branching and merging. Last minute commits..  Code is not broken into logical files.  Code is not functionalized where appropriate.  Code has very limited or difficult to follow documentation. | Code is all stored in a documented and accessible Github repo.  Some usage of version control branching and merging.  Code is broken into logical files in a limited manner.  Code is has a few functions where appropriate.  Code has limited documentation. | Code is all stored in a somewhat documented and accessible Github repo.  Mostly proper usage of version control branching and merging.  Code is mostly broken into logical files.  Code is somewhat functionalized where appropriate.  Code has enough documentation. | Code is all stored in a well documented and accessible Github repo.  Proper usage of version control branching and merging.  Code is broken into logical files.  Code is functionalized where appropriate.  Code has exceptional documentation. |
| **Length of Paper and Format** | **Deduct 11 points** | **Deduct 6-10 points** | **Deduct 1-5 points** | **0 points deducted** | /--- |
| Paper substantially lacks the required length. Paper not submitted as Google Doc with comment access.  Many grammar or spelling errors. | Paper is somewhat lacking the required length. Paper not submitted as Google Doc with comment access.  Some grammar or spelling errors. | Paper is slightly lacking the required length. Paper not submitted as Google Doc with comment access.  A few grammar or spelling errors. | Paper exceeds or meets the required length. Paper submitted as Google Doc with comment access.  No grammar or spelling errors. |
| **TOTAL POINTS (sum of criteria)** | | | | | **/100** |