**Big Data Application Use Case Guideline**

Please submit your paper using the ACM paper format with the following sections provided below.

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| --- | --- |
| **Goals and Objectives**  | Describe the goals and objectives of this use case |
| **Use Case Description** | Provide a detailed use case description |
| **Data** **Workflow/ Interaction** | Describe data ***workflow or interaction*** between the possible different components below (as needed):(a) System Orchestrator – describe the overall application workflow(b) Data Source – describe the data source characteristics (e.g., which network protocol, data formats, access rights, etc. were used)(c) Analytics Processing – describe which analytics tools were used to pre-process, process, and post-process the given datasets(d) Computing Environment – describe which horizontal/vertical computing environments were used in terms of software platforms (e.g., NoSQL, Hadoop, etc.) and computing infrastructure (e.g., VM, storage, networking, etc.)(e) Security and Privacy – describe any security and privacy needs(f) System Management – describe how the overall system was managed and how it is monitored for its performance and integrity. |
| **Current** **Solutions** | **Compute (System)** | Describe which computing system was used in your application |
| **Storage** | Describe which storage system was used in your application |
| **Networking** | Describe which networking system was used in your application |
| **Software** | Describe which software was used in your application |
| **Big Data Characteristics** | **Data Source (distributed/centralized)** | Describe if the data are in motion or at rest |
| **Volume (size)** | Describe the current and future size of your datasets |
| **Velocity** **(e.g. real time)** | Describe your prediction on how fast the data will grow |
| **Variety** **(multiple datasets, mashup)** | Describe the data types (e.g., text, audio, video, image, etc.) and their respective data formats (e.g., PDF, mp3, mpeg4, jpeg, etc.) |
| **Variability (rate of change)** | Describe the quality or degree of being subject to variation |
| **Big Data Science** **(collection, curation,** **analysis,****action)** | **Value** | Describe the usefulness of the data  |
| **Veracity** | Describe the quality of the data |
| **Data Analytics** | Describe the data analytics processing techniques |
| **Visualization** | Describe the data representation after analytic processing |
| **Future Approach** | Describe your ideal computing processing environment which will enable you, as a data scientist, to perform your work more effectively and efficiently. |