Big Data and Digital Technology Workshop



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Do we need to invoke Machine Learning or Artificial Intelligence to add value to big data?

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Whenever we mention Big Data, we hear Machine Learning (ML) and/or Artificial Intelligence (AI). Is this required? Radio Frequency Interference (RFI) affects astronomical data that is measured by radio telescope such as MeerKAT. RFI is known to be dynamic in various aspects. There is often claims that the RFI environment radio facility around site is changing. How can we quantify this from the telescope perspective? Once given their science dataset, astronomers remove the RFI and hardly give feedback to the Operations, Commissioning and RFI team about the quality of their data, unless it is really bad. Furthermore, how confidently can one be to remove some potentially "affected" data points? In this talk I will show how we address the above 3 questions from a data science perspective.

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