**Dataset:** The band dataset and its description file are attached with the email. The same information can also be obtained from UCI repository at <https://archive.ics.uci.edu/ml/datasets/Cylinder+Bands>. This dataset contains 512 number of instances and comprises of 40 attributes, out of which 20 are numeric and 20 are nominal. The last attribute #40 is the predicted or class variable with two values ‘band’ and ‘noband’. The dataset also contains missing values, shown as ‘?’ in the dataset.

**Task:** The task is to build classifier(s) on the band dataset that can identify the classes ‘band’ and ‘noband’ with high performance.

**Approach:** A robust classifier evaluation strategy can make your solution stand out. A discussion on the reasons or evidence for a particular approach to work better will be good to include. You can also report any idiosyncrasies that you may observe in this dataset.

**Deliverables:** You are expected to send your solution/approaches in the form of a short report. Please do not send your code; however, you can include figures, tables in the report. The submitted report should not be more than 3-pages long. You should submit the report by tomorrow midnight. In case, you need more time, please let us know with a valid reason.

**Non-submission**: If for any reason, you decide to withdraw from this task or do not submit the report by the deadline, no explanation will be asked. No further communication will be made in such case.

**Next Steps**: If your solution is recommended by the evaluation committee, you may be asked to appear for a video interview. No individual feedback will be provided for the solution you submitted to us.

Good Luck, we hope it will be an interesting task for you!