Dibyendu Mishra

Pranav Ragupathy

Swagam Dasgupta

Professor Ravi Kothari

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# **Title:**

On Formalising a Definition for Fairness in Machine Learning

# **Scope:**

1. Reviewing numerous research papers from various disciplines in order to come up with a definition for fairness in machine learning.
2. Formalising the aforementioned definition with a mathematical model and deriving an algorithm with its loss function.
3. Implementing our algorithm on different datasets in order to define the domains within which our definition is applicable. This will also include a metric how our definition fares against other prevalent ones.

# **Timeline:**

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| --- | --- | --- | --- | --- |
| **Sl No.** | **Topic** | **Deadline** | **Completed** | **Missed Deadline** |
| 1. | Definition (In words) | 10/10/2018 |  |  |
| 2. | Mathematical Modelling | 24/10/2018 |  |  |
| 3. | Algorithm | 31/10/2018 |  |  |
| 4. | Implementation and Metrics | 28/11/2018 |  |  |