

## *IS467 Midterm Report*

**Title**

**Group Number ##**

Student 1 name, Student 2 name, Student 3 name, Student 4 name, Student 5 name

### **Abstract (~0.5 page)**

Provide a concise summary of the problem statement, dataset and the overall contribution of the project.

### **Introduction (~1 page)**

The introduction should present a detailed explanation of Responsible AI and its importance. It should then introduce the specific Responsible AI layer being addressed in the project, explaining its role and significance in detail. Key points related to the significance and application of this layer should be elaborated on to establish a strong foundation for the study.

### **Literature Review (~2 pages)**

The literature review should discuss at least 8 prior related research works and existing studies relevant to the chosen Responsible AI layer. All references must be cited using IEEE citation style [1], [2], etc. The section should summarize the relevant techniques used in the reviewed papers, highlight research gaps, and justify the approach chosen for the project.

### **Dataset Selection and Preprocessing (~1.5 pages)**

This section should describe the dataset(s) used in the project and justify its suitability for Responsible AI evaluation. If the dataset requires preprocessing, a detailed explanation should be provided, including the steps taken to clean and refine the data. The discussion should cover how missing values were handled, feature selection strategies, and any transformations applied to prepare the dataset for further analysis.

### **Exploratory Data Analysis (EDA) (~2 pages)**

The exploratory data analysis should present insights using visualizations. It should identify data distribution, trends, and outliers while discussing any class imbalances or potential biases present in the dataset. Proper graphical analysis should be included using Matplotlib, Seaborn, or similar Python libraries to ensure clarity and depth in the data exploration process.

### **Your Proposed Plan for the Remaining Work (~1 page)**

This section should outline how the remaining work will be carried out. It should provide a structured plan detailing the next steps in the research, methodology, implementation strategies, and any key milestones anticipated in the upcoming phases of the project.

### **Group workload distribution**

Each group should provide a breakdown of the workload distribution among all team members. This section is not included in the page count.

### **Reference list**

Reference is not included in the page count. Include all cited works in IEEE format at the end of the report.

### **Appendix**

If you want to add images, tables, or additional material, you can submit them using the appendix. The appendix content will not be counted towards the page limit.

### **Formatting Requirements:**

Font: Arial, 11-point size.

Spacing: Maximum of 1.15 spacing, no more than that.