**Title:**

**Author(s) name:**

**Abstract:** (write this part last when you are done with the paper)

* **Introduction:**
  + Problem definition
  + Motivation – why this problem is important (bring statistics)
* **Literature review:**
  + Previous works done in this area (it would be nice if you bring a table and categorize works based on the methods, data, etc.)
  + The pros and cons of the methods
  + Gap, what is missing in previous works? What are we going to address in this paper?
* **Data:**
  + Data description – how many data samples, how many features, which one is categorical, which one is continuous. Add a table for frequency of features. Maybe you can bring a chart for Inclusion/Exclusion Criteria.
  + Data visualization (e.g., Figures, correlation plot matrix, box plots, etc.)
  + Data preparation/pre-processing
    - A table for frequencies of missing values (% and number)
    - Missing data imputation or removal? (e.g., remove rows that all features are missing – impute features that has less missing data)
    - Converting categorical variables to binary ones
    - Normalizing continuous variable using Z-score
    - Outlier detection – removing outliers
* **Models:**
  + Performance metrics used in this study (e.g., RMSE, MAE for regression; G-mean, Sensitivity, Specificity for classification)
  + Experimental set up (Cross validation or train/test split)
  + Hyperparameter tuning
  + Software packages you used
  + ML models used
* **Results and Discussion:**
  + Heatmaps
  + Tables and figures along with analysis for each table/figure
  + Sensitivity analysis based on parameters
* **Conclusion and Future Direction:**
* **References:**