

**School of Engineering and Applied Science**

**BTech ICT Semester VI**

**CSE523 Machine Learning**

**Project Progress Report**

**Week 5**

* **Team:** Binary Beasts
* **Team members:**

|  |  |
| --- | --- |
| Frency Chauhan | AU1841105 |
| Nirva Sangani | AU1841074 |
| Yagnik Hingrajiya | AU1841094 |
| Vijay Rana | AU1841107 |

1. **Tasks performed this week:**

* This week we applied Maximum Likelihood Estimation for Linear Regression Model and also implemented Random Forest Model on our Dataset.

1. **Outcomes of the tasks performed:**

* After Maximum Likelihood Estimation, the prediction accuracy we get is 52% for train data and 47% for the test data which is more than simple linear regression model accuracy(46%)

.

* For the Random Forest Model, we are getting prediction accuracy of 92% for train data and 52% for test data.
* Overfitting problem is present with random forest model implementation.

1. **Tasks to be performed in the upcoming week:**

* The week following the mid semester examination, we will tune hyperparameters of the existing models and implement the linear regression model from scratch.