## **Logistic Regression**

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#### **Abstract**

Data thinking Zulip chat data analysis using Linear Regression, Logistic Regression and Embedding

### 1 Introduction

Here I will briefly describe each of the analyses I performed, why I chose them, and the math equation for the linear regression, logistic regression, and embedding I used.

## 2 Linear Regression

For linear regression, I used an inbuilt model imported from sklearn library. Plotted it with the help of Matplotlib

## 3 Logistic Regression

For Logistic Regression, I again used an inbuilt model from sklearn. prepared the data using pandas data frame.

## 4 Embeddings

I am not sure how I did embedding. vectorizing data and managing dimensionality using TSNE. Plotting it with the help of from "mpl $_toolkits.mplot3dimportAxes3D$ ".

#### 5 Conclusion

Thanks for the exciting Homework. Learned a lot!

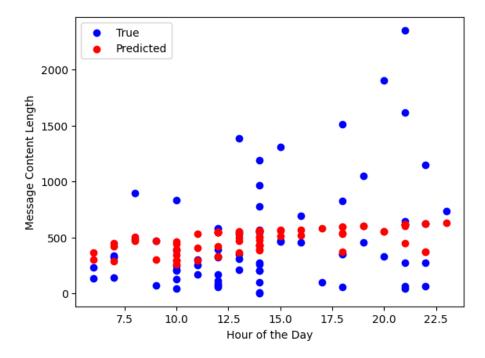


Figure 1: Linear regression

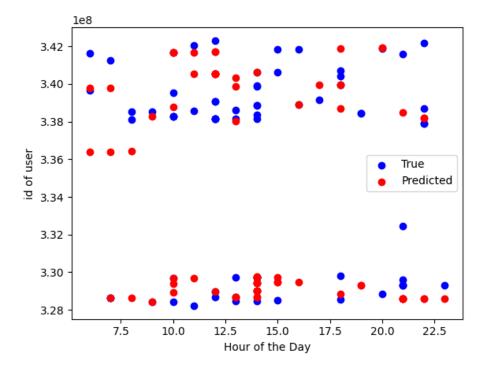


Figure 2: Logistic regression

# Message Content Embeddings Visualization (3D)

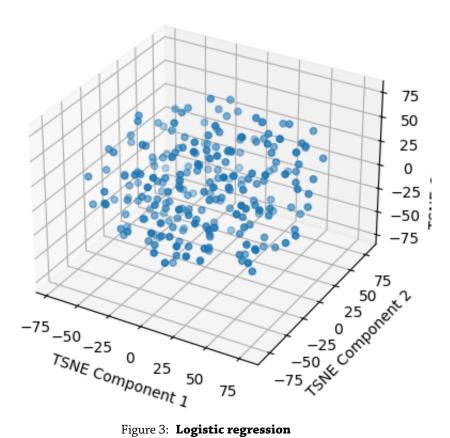


Figure 3: Logistic regression