Employee Sentiment Analysis

# 📌 Overview

This project analyzes employee messages to assess sentiment, engagement, rankings, flight risk, and builds a simple predictive model.

# 📊 Key Results

## Sentiment Distribution

Positive: 47.46%  
Neutral: 38.2%  
Negative: 14.34%

## Top 3 Positive Employees

A screenshot of a computer screen

AI-generated content may be incorrect.

## Top 3 Negative Employees — 2011-07

|  |  |
| --- | --- |
|  |  |

## Overall Top 3 Positive (All Months)

|  |  |
| --- | --- |
| Employee | Total Score |
| kayne.coulter@enron.com | 43 |
| sally.beck@enron.com | 41 |
| johnny.palmer@enron.com | 36 |

## Overall Top 3 Negative (All Months)

|  |  |
| --- | --- |
| Employee | Total Score |
| bobette.riner@ipgdirect.com | 1 |
| rhonda.denton@enron.com | 1 |
| sally.beck@enron.com | 2 |

## 🚨 Flight Risk Employees (≥4 negative emails in any 30-day window)

A screenshot of a computer

AI-generated content may be incorrect.

## 🤖 Predictive Model (Linear Regression)

A screenshot of a computer program

AI-generated content may be incorrect.

## 📁 Files

* task1-task6.ipynb
* labeled\_dataset.csv
* monthly\_sentiment\_scores.csv
* top3\_positive\_per\_month.csv
* top3\_negative\_per\_month.csv
* flight\_risk\_employees.csv
* model\_coefficients.csv
* visualization/ (charts)