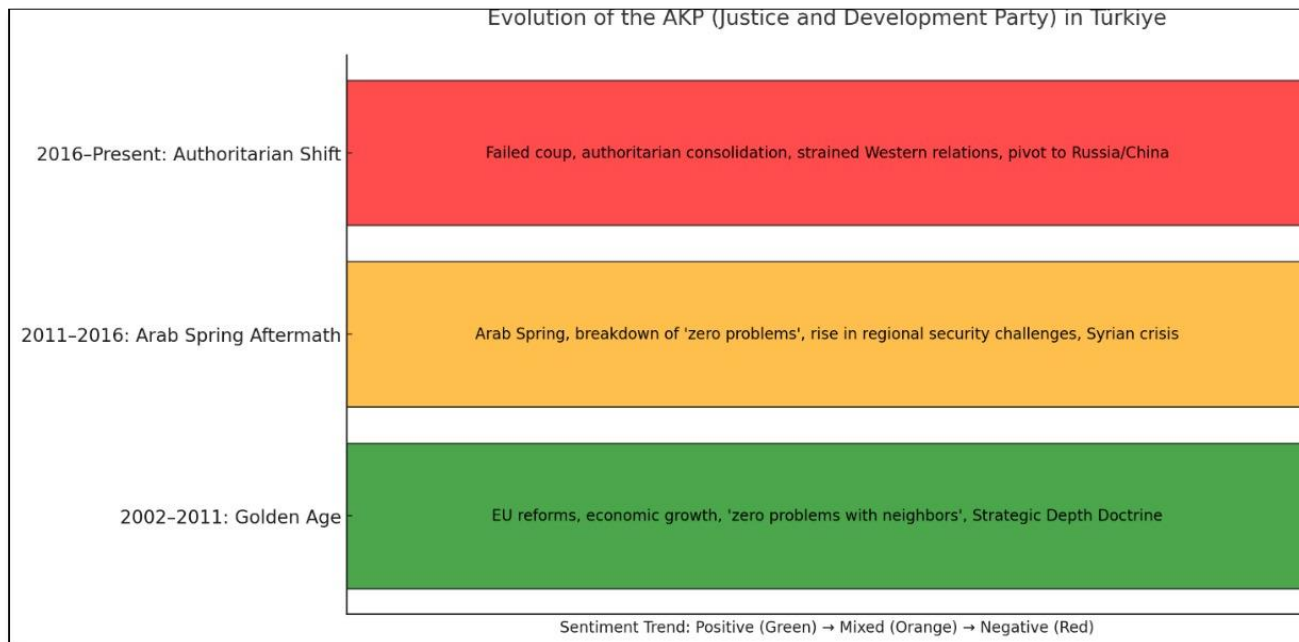


[illegible]

Introduction

Why Sarcasm?

- **Political Landscape in Türkiye:** Transitioning toward a hybrid democracy with authoritarian tendencies.
- **Risk of Open Criticism:** Increased suppression of dissent and imprisonment for political speech.
- **Irony as a Tool:** Sarcasm and irony provide a safer way to critique political leaders and policies.
- **Public Discontent:** Sarcasm uncovers hidden patterns of criticism and public sentiment.
- **Freedom of Expression:** Reflects how citizens adapt to constraints on free speech in challenging socio-political conditions.



Research Design

Data Scrapping & BERT

1.Data Collection:

- Scraped 100,000 entries from Ekşi Sözlük.
- Focused on Erdoğan and Kılıçdaroğlu.

2.Preprocessing:

- Cleaned and normalized text.
- Very short & long entries, contains URL, authors with so many entries

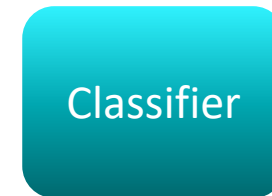
3. Annotation and Semi-Supervised Training:


- Annotated 2,5k entries approx. for sarcasm detection.
- Trained the model on this annotated dataset.
- Used the trained model to predict sarcasm on the remaining data.
- Validated the predictions by comparing them with the annotated data to assess model performance.

4. Model Training:

- Fine-tuned BERT for sarcasm detection.

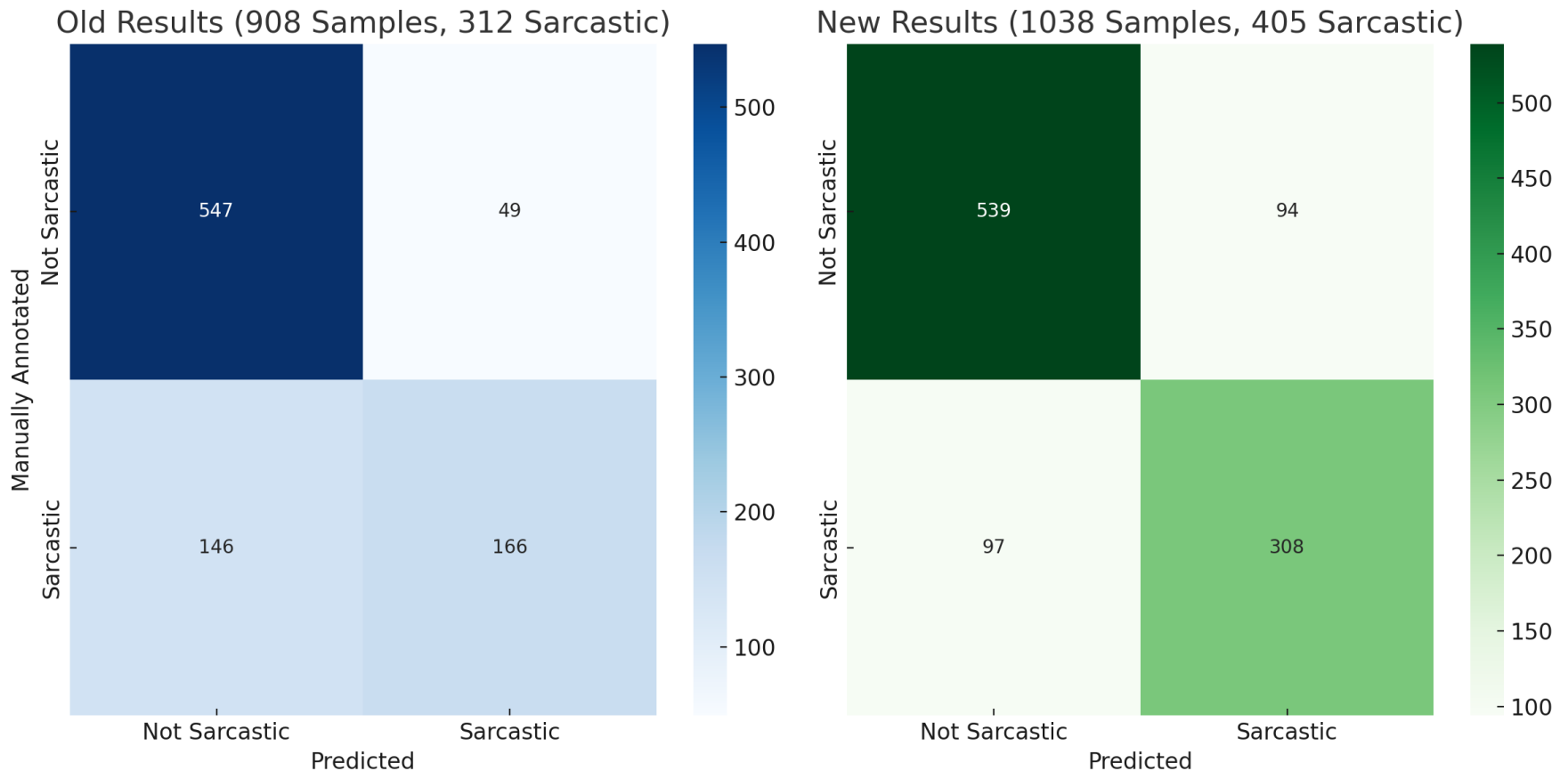
sultanlar sultanı, hakanlar hakanı padişahım yine 48 boyutlu satranç oynadı ilmek ilmek işledi ve bugün suriyeyi fethetti. asrın lideri.



 Embedding

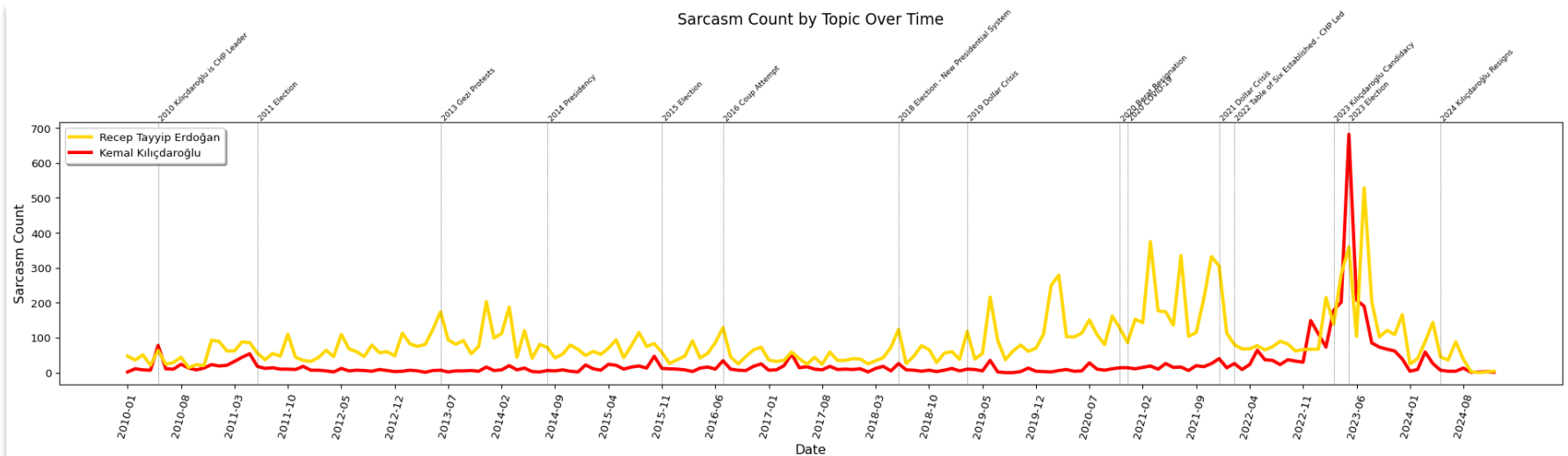
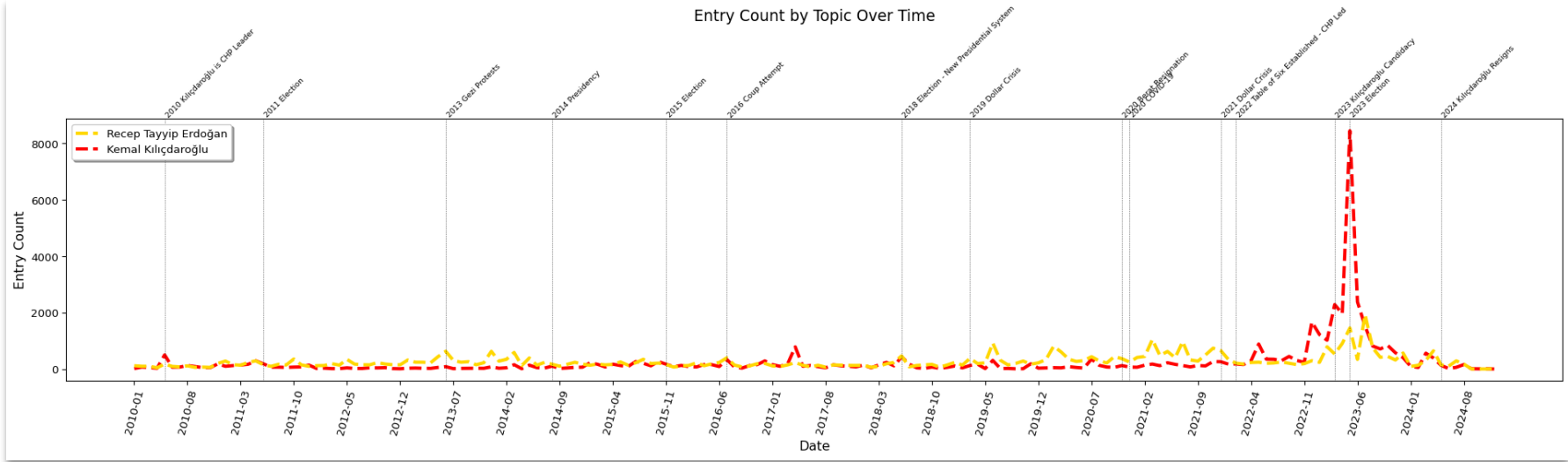
Model Results

Improvement in Sarcasm Detection After Re-annotation and Balanced Training



Sarcasm Trends Over Time

Erdoğan vs Kılıçdaroğlu



THANK YOU



KOÇ
ÜNİVERSİTESİ