Textbusters: Detecting LLM-Generated Text

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Team Introduction

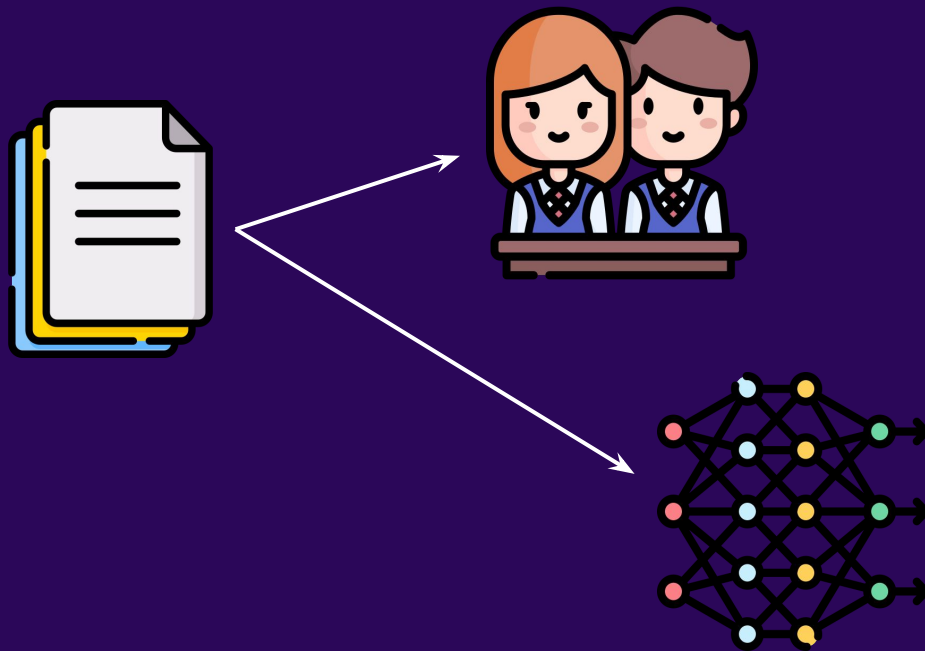Elia Yakin

Yasmin Zakaim

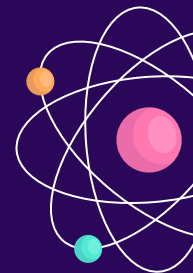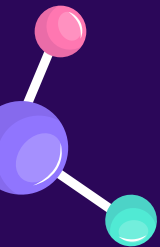yasminz.com

Overview

The Challenge

Provided Data

- Train set of:
  - 1,375 essays written by students
  - **3** essays written by LLMs

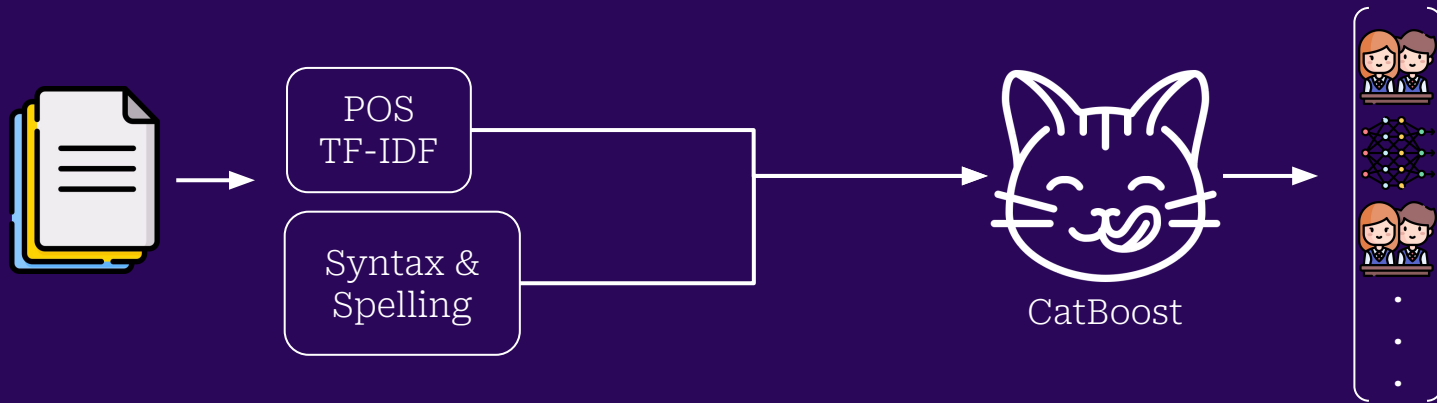- Test set of about 8,600 instances

Competition Constraints

- Submission run-time <= 9 hours
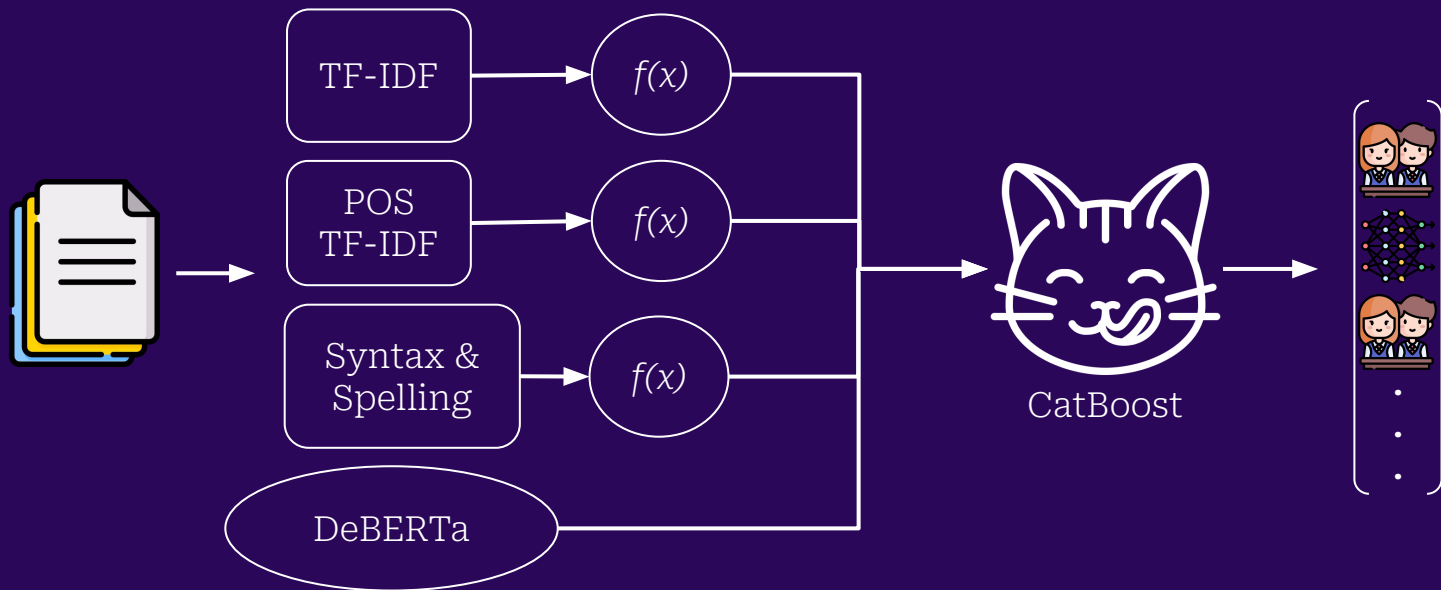
- Submission independent of internet access

Our Strategy

- Using multiple methods to enhance our learning

- Lean pipeline

- Starting with public data

- Prioritizing syntax over semantics

- Misspelled words as a main model feature

Initial Architecture

POS TF-IDF

Syntax & Spelling

CatBoost

Final Architecture

TF-IDF → $f(x)$

POS TF-IDF → $f(x)$

Syntax & Spelling → $f(x)$

DeBERTa

CatBoost

Results

0.83
Public Score

0.74
Private Score

67%
Rank Percentile

#	Team	Members	Score	Entries
1	🔍 📝 🎮 👾		🪙 0.987...	331
2	Guanshuo Xu		🪙 0.983...	74
3	nlp team	+3	🪙 0.974...	280
4	Ertugrul & Chase		🪙 0.973...	399
5	Linguistic Ninjas	+3	🪙 0.972...	289
6	Davide Cozzolino		🪙 0.969...	33
7	Hao Mei		🪙 0.965...	78

Conclusions

- Teams - it's complicated

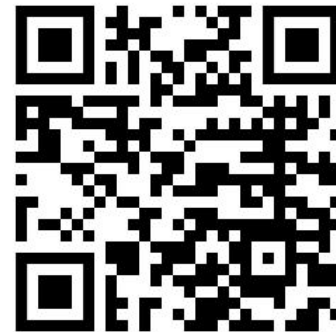- Submission, submission, submission!

- Discussion, discussion, discussion!

Thank you :)

Elia Yakin

Yasmin Zakaim