



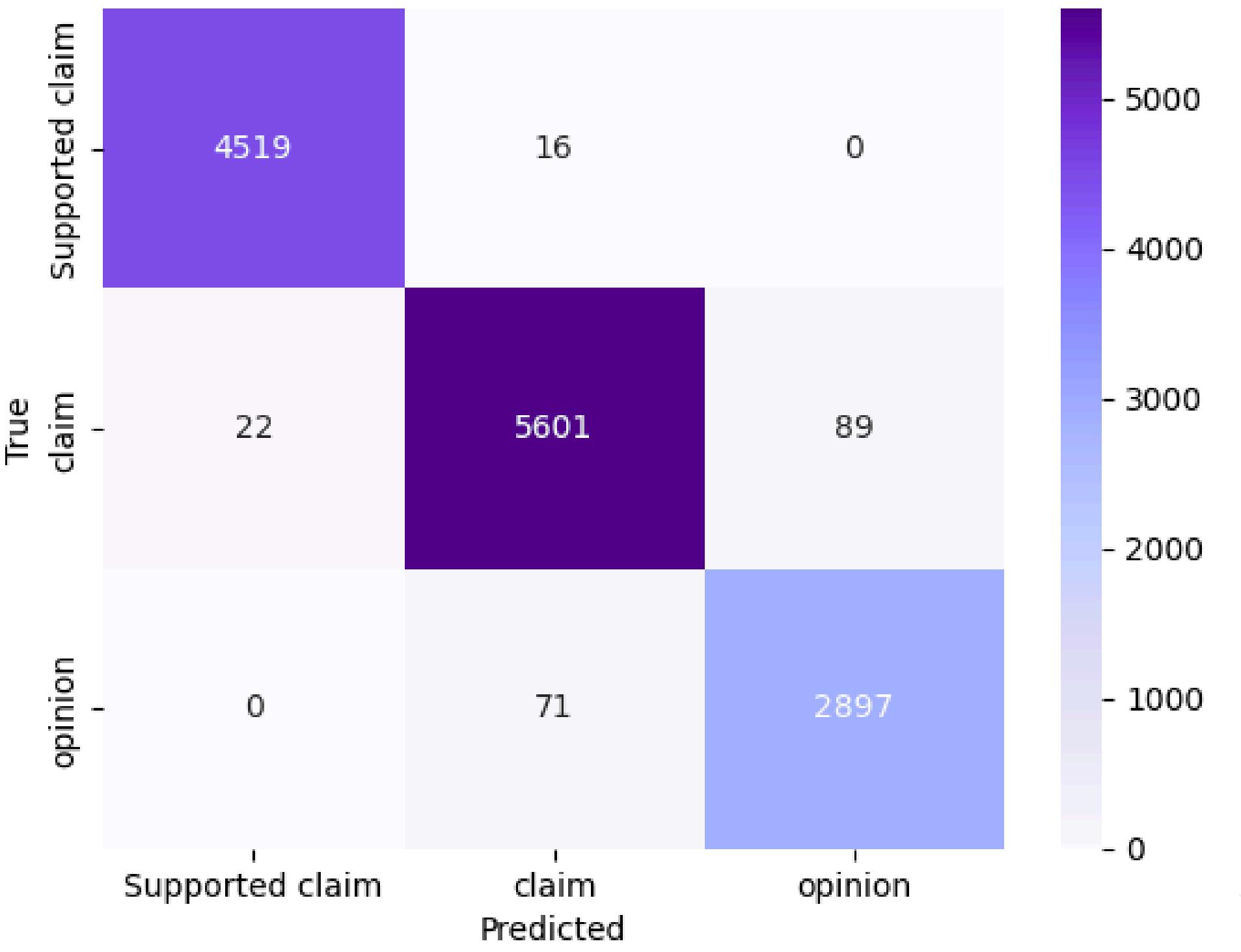
Faktz: An NLP and Machine Learning-Based Platform for Content Credibility on TikTok

Problem Statement

- TikTok's algorithm prioritizes engagement, not accuracy.
- Misinformation on TikTok spreads faster than users can verify it.
- There is no tool that identifies unverified content.

The screenshot shows the Faktz platform interface. At the top, there's a navigation bar with 'Home', 'Analyze' (which is highlighted in purple), 'Community', and 'Profile'. A greeting 'Hi, Alex!' with a hand icon is on the right. Below the navigation is a section titled 'Analyze TikTok Content' with the sub-instruction 'Paste a TikTok video link below to check its credibility and get AI-powered insights.' A text input field contains a URL: 'https://www.tiktok.com/@healthfactsdaily/video/7298456123012345678'. A large purple button labeled 'Analyze Video' is below the input. To the right, under 'Analysis Results', there's a video thumbnail of a man speaking at a podium. Above the video is a 'Credibility Score' bar set at 72%. Below the video, under 'Content Type', there are three tabs: 'Fact' (selected), 'Opinion', and 'Claim'. Under 'AI Analysis', it says 'This video is supported by the following resources:' followed by a bulleted list: 'The World Health Organization (WHO)' and 'The American Heart Association'. At the bottom of the results section are two buttons: 'View Discussion' and 'Share to Feed'.

Confusion Matrix - TF-IDF + SVM (Test)



Project Objectives

- Collect, clean, and annotate TikTok transcripts.
- Build a complete NLP processing pipeline.
- Train an ML classification model for credibility.
- Deploy the model into a web platform.

System Features

- 01 ➤ TikTok Transcript Processing Pipeline
- 02 ➤ ML-Powered Credibility Classification
- 03 ➤ Source Extraction for Supported Claims
- 04 ➤ Transparent Confidence Score Output

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System Strengths

- Trained on 45k+ TikTok + news transcripts
- Handles Gen Z slang & informal language
- Fast pipeline (clean → vectorize → classify)
- High-accuracy SVM classifier
- Transparent confidence scoring

Test Scores

| | precision | recall | f1-score | support |
|-----------------|-----------|--------|----------|---------|
| Supported claim | 1.00 | 1.00 | 1.00 | 4535 |
| claim | 0.98 | 0.98 | 0.98 | 5712 |
| opinion | 0.97 | 0.98 | 0.97 | 2968 |
| accuracy | | | | 0.99 |
| macro avg | 0.98 | 0.98 | 0.98 | 13215 |
| weighted avg | 0.99 | 0.99 | 0.99 | 13215 |

Input

```
"text": "According to a 2023 report from the World Health Organization (WHO), regular physical activity can reduce the risk of heart disease by up to 30%. The American Heart Association also recommends at least 150 minutes of moderate exercise per week, confirming that staying active has long-term health benefits for the heart and overall wellbeing."
```



Output

```
{
  "confidence (%)": 98.89,
  "label": "Supported claim",
  "resource": "Resources: the World Health Organization (WHO, The American Heart Association)"}
```

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