#### SemEval 2025 Shared Task 7: Multilingual and Crosslingual Fact-Checked Claim Retrieval

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#### Main Goal

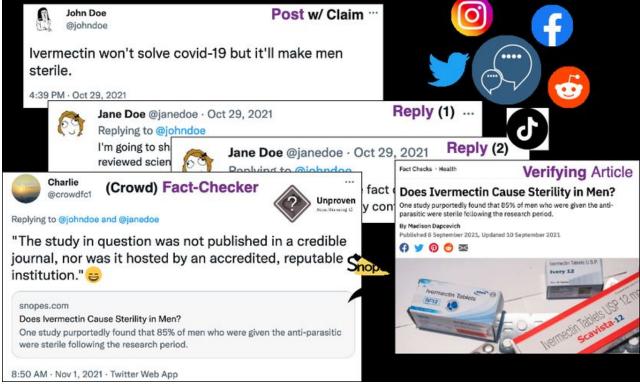
## Efficiently identifying previously fact-checked claims across multiple languages.

#### The media has not pixelated the Mercadona logo on the truck that appears in this video of a rescue in Valencia

A video is circulating on social media showing the rescue of a Mercadona truck that was trapped in a flood caused by the passage the Dana in Spain and whose logo was allegedly pixelated by the media.

However, the Valencia Provincial Firefighters Consortium has told Newtral.es that it was they who distributed the images with the brand blurred for reasons of privacy of the victims.





### Dataset: Example

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claim	Using a mobile phone while it charges is dangerous	
instances	['https://factcheck.afp.com/misleading-video-risks-charging-phone-spreads-worldwide#4af86ceff67a6d6e81b54bf60a3bb0c6']	
title	Misleading video on risks from charging phone spreads worldwide	
full_text	Misleading video on risks from charging phone spreads worldwide Using a mobile phone while it charges is dangerous	

### Dataset: Example

# Misleading video on risks from charging phone spreads worldwide

This article is more than one year old. | Published on March 4, 2021 at 19:22 | S 3 min read |

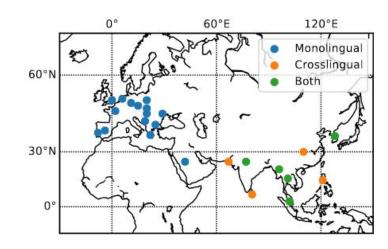
By Alex CADIER, AFP USA

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A video shared hundreds of thousands of times warns against using mobile phones while they charge because "electric waves" will pass through your body. This advice is misleading, according to experts who say other appliances would also exhibit similar harmless voltage leakage, while the real danger -- though slim -- could come from faulty batteries and low-quality chargers.

"Don't talk on the phone while on charge" warns the video, shared more than 50,000 times on Facebook and more than 600,000 times on TikTok. It has spread in the United States, Canada, Nigeria, and the Philippines.

#### Dataset: MultiClaim



The **MultiClaim dataset** was generated by collecting:

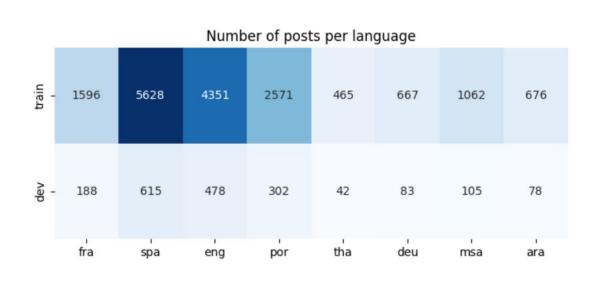
- **1. Fact-checks**: A total of **205,751 fact-checks from 142 organizations in 39 languages**, including claims, titles, publication dates, and URLs.
- 2. Social Media Posts: 28,092 posts in 27 languages from platforms like Facebook, Instagram, and Twitter, selected and linked to relevant fact-checks by professional fact-checkers.
- **3. Pairs**: **31,305 post-fact-check pairs** (26,774 monolingual and 4,212 crosslingual), created based on professional fact-checker assignments.

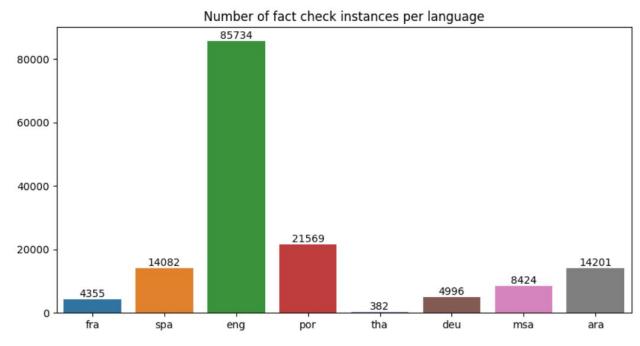
#### Dataset: Provided Splits

- 153,743 fact checks
- •24,431 posts
- 25,743 post-fact-check pairs



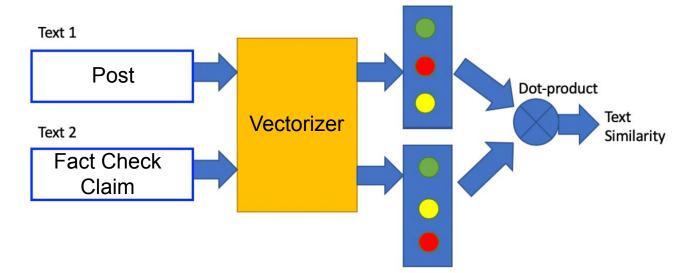
Monolingual 18,907 17,016 + 1,891 Crosslingual 5,524 4,972 + 552

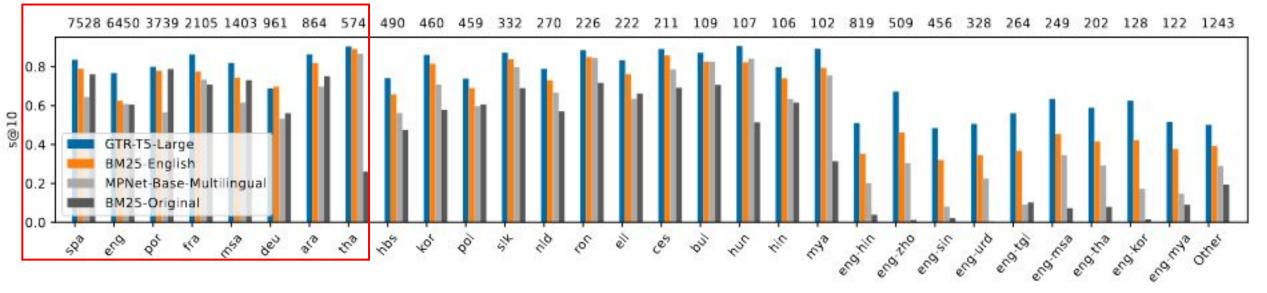




## Previous Approaches: Retrieval Systems

- Sparse Retrieval: BM25 vectorizer (tf-idf based; No training + fast inference)
- **Dense Retrieval**: Multilingual embeddings (Pre-trained + slower inference)

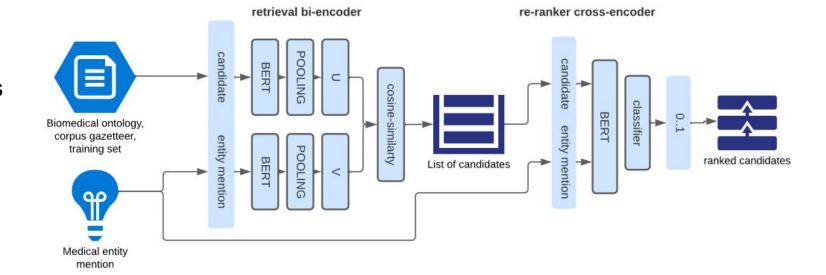




# Proposed Approaches: Contrastive Learning

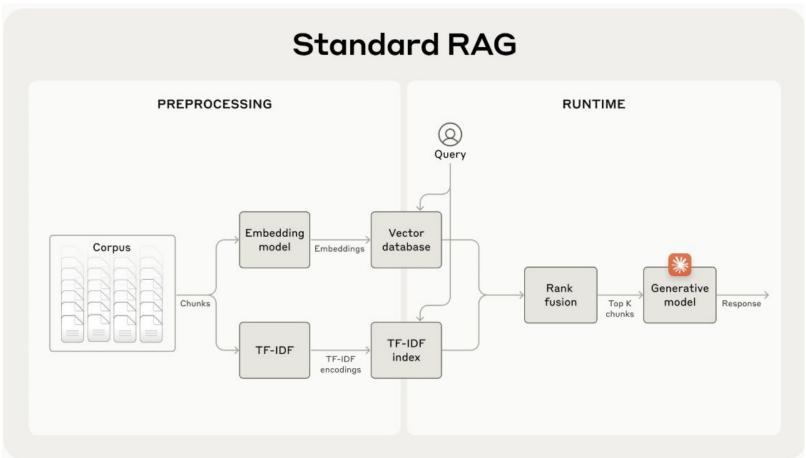
#### **Contrastive Learning Approach**

- Biencoder selection:
  - BM25
  - Multilingual TEMs
  - English Translations + TEMs
  - Hybrid
- Training Re-ranker using contrastive learning
  - Triplets Generation
    - Negative Sampling



# Proposed Approaches: Generative Models

- K-shot Naïve Generation
- Instruction Fine-tuning
- RAG



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