

# CheckThat! 2020

3<sup>rd</sup> edition

**Enabling the Automatic Identification and  
Verification of Claims in Social Media**



# Organization



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Barrón-Cedeño**



**Tamer  
Elsayed**



**Preslav  
Nakov**



**Giovanni  
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**Maram  
Hassanain**



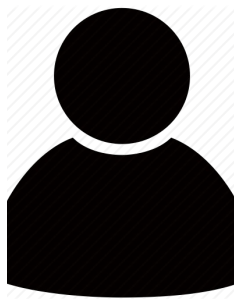
**Reem  
Suwaileh**



**Fatima  
Haouari**



**Nikolay  
Babulkov**



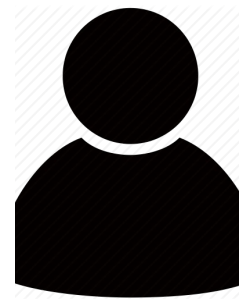
**Bayan  
Hamdan**



**Alex  
Nikolov**



**Shaden  
Shaar**



**Zien Sheikh  
Ali**

# Translation into NLP/IR Tasks

## 1. Check-Worthiness\*

← Twitter stream

→ s worth fact-checking

\* 5. Check-Worthiness on debates/speeches/press conferences

# Human Tasks, NLP/IR Support

## 1. Check-Worthiness



# Human Tasks, NLP/IR Support

## 1. Check-Worthiness



Eric Trump  
@EricTrump

Since this will never get reported by the media, I wanted to share a copy of this check. @realDonaldTrump is once again donating his salary back to the United States Government — This quarter, it will be donated to @HHSGov to confront, contain, and combat #Coronavirus. 🇺🇸🇺🇸



Donald J. Trump


**D. Trump is donating his salary to combat COVID19?**

**This is check-worthy!**

# Human Tasks, NLP/IR Support

## 2. Verified Claim Retrieval

←  + verified claims pool

→ ranking of verified claims according  
to their potential to verify 





# Human Tasks, NLP/IR Support

## 2. Verified Claim Retrieval

@realDonaldTrump is once again donating his salary back to the United States [...] to confront, contain, and combat #Coronavirus



**Fact check: President Donald Trump donates his salary, but he still makes money**




**MOLLY STELLINO** | USA TODAY

<https://eu.usatoday.com/story/news/factcheck/2020/07/11/fact-check-donald-trump-donates-salary-but-he-still-makes-money/5410134002/>



# Human Tasks, NLP/IR Support

## 3. Evidence Retrieval

←  claim + Webpages

→ Web passages useful to verify 

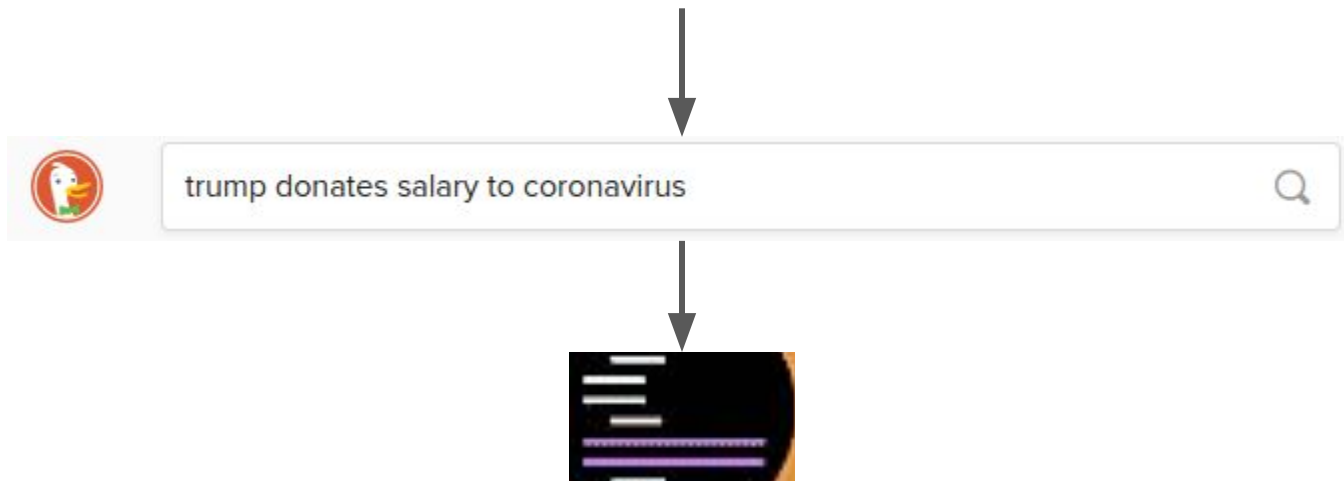




# Human Tasks, NLP/IR Support

## 3. Evidence Retrieval

@realDonaldTrump is once again donating his salary back to the United States [...] to confront, contain, and combat #Coronavirus



# Human Tasks, NLP/IR Support

## 4. Claim Verification

←  claim + Webpages + passages

→ Veracity of the claim



# Human Tasks, NLP/IR Support

## 4. Claim Verification



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Donald J. Trump

11:11 PM · Mar 3, 2020 from Manhattan, NY · Twitter for iPhone



MARKETS BUSINESS INVESTING TECH POLITICS CNBC TV

POLITICS

## Trump donates his 2019 fourth-quarter salary to help combat coronavirus

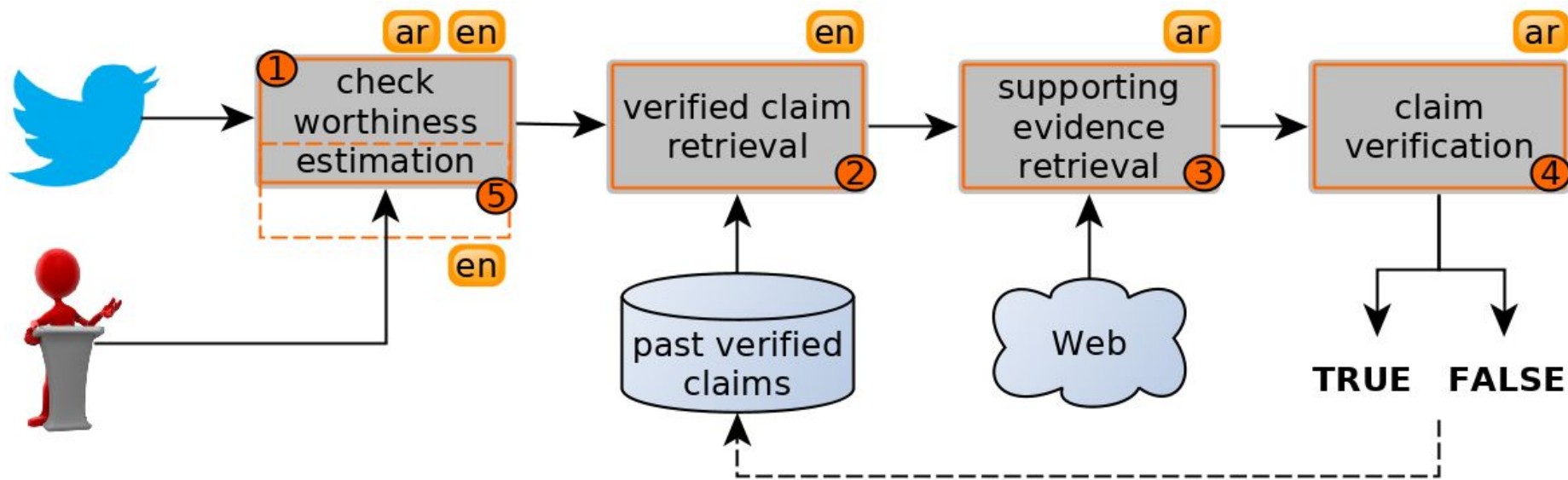
PUBLISHED TUE, MAR 3 2020 3:22 PM EST | UPDATED TUE, MAR 3 2020 5:03 PM EST



Christina Wilkie  
@CHRISTINAWILKIE

SHARE    

# The CheckThat! Fact-Checking Flowchart



# Languages and Participation

	1	2	3	4	5
ar	✓		✓	✓	
en	✓	✓			✓

## Datasets summary

- 1,600+ tweets
- 15,000+ web pages
- 60,000+ debate/speech/conference sentences

## Participation

- 23 teams; 86 submissions

# Models Highlights

## 1+5. Check-Worthiness

**Transformers.** BERT, RoBERTa, AraBERT, multilingual BERT

**Classifiers.** NNs, SVMs

**Features.** Word embeddings, LASER, engineered features

## 2. Verified Claim Retrieval

**Transformers.** BERT

**Scorers.** SVM, similarity, Terrier, Elastic search

## 3. Evidence Retrieval

- Feature-based similarity between claims and web page snippets

## 4. Claim Verification

- Supervised model fed by engineered features

# Models Highlights: Details in the LNCS/CEUR Papers

Team		Transf		Models						Distrib.		Features		Other						
		BERT	RoBERTa	Huggingface	BiLSTM	CNN	Rnd forest	Linear reg	Logistic reg	SVM	FastText	GloVe	PCA	Topic models	tf-idf	Dependencies	POS	NEs	Ext. data	Graph relations
Accenture	[52]	●																		
BustingMisinformation	—					●				●	●		●	●	●					
Check_square	[14]	●								●			●			●	●	●		
Factify	—	●																	●	
NLP&IR@UNED	[37]				●							●								●
QMUL-SDS	[2]	●				●														
Team_Alex	[42]		●																	
TheUofSheffield	[38]						●				●				●					
TOBB ETU	[34]	●							●								●			
UAICS	—	●		●																
SSN_NLP	—		●																	
ZHAW	—						●										●	●		



# Join us TODAY for the CheckThat! Parallel Sessions

Session	Time (CET)	Summary	
1	11:00-12:35	<ul style="list-style-type: none"><li>- Deeper CheckThat! 2020 overview</li><li>- Task 1 Check-Worthiness</li></ul>	en, ar
2	13:00-14:30	<ul style="list-style-type: none"><li>- Task 2 Verified Claim Retrieval</li><li>- Task 3 Evidence Retrieval</li><li>- Task 4 Claim Verification</li></ul>	en ar ar
3	17:00-18:30	<ul style="list-style-type: none"><li>- 3 invited talks</li><li>- Round table</li><li>- Final remarks</li></ul>	



# S3 (17:00 CET) Features 3 Fact-Checking Guests



**David  
Corney**



**Making fact checks work harder:  
claim matching at Full Fact**



**Rubén  
Míguez**



**ClaimHunter - an unattended claim  
detection service for fact-checkers**



**Moath  
Althaher**



**The philosophy of Fake News -  
The Big Questions!**

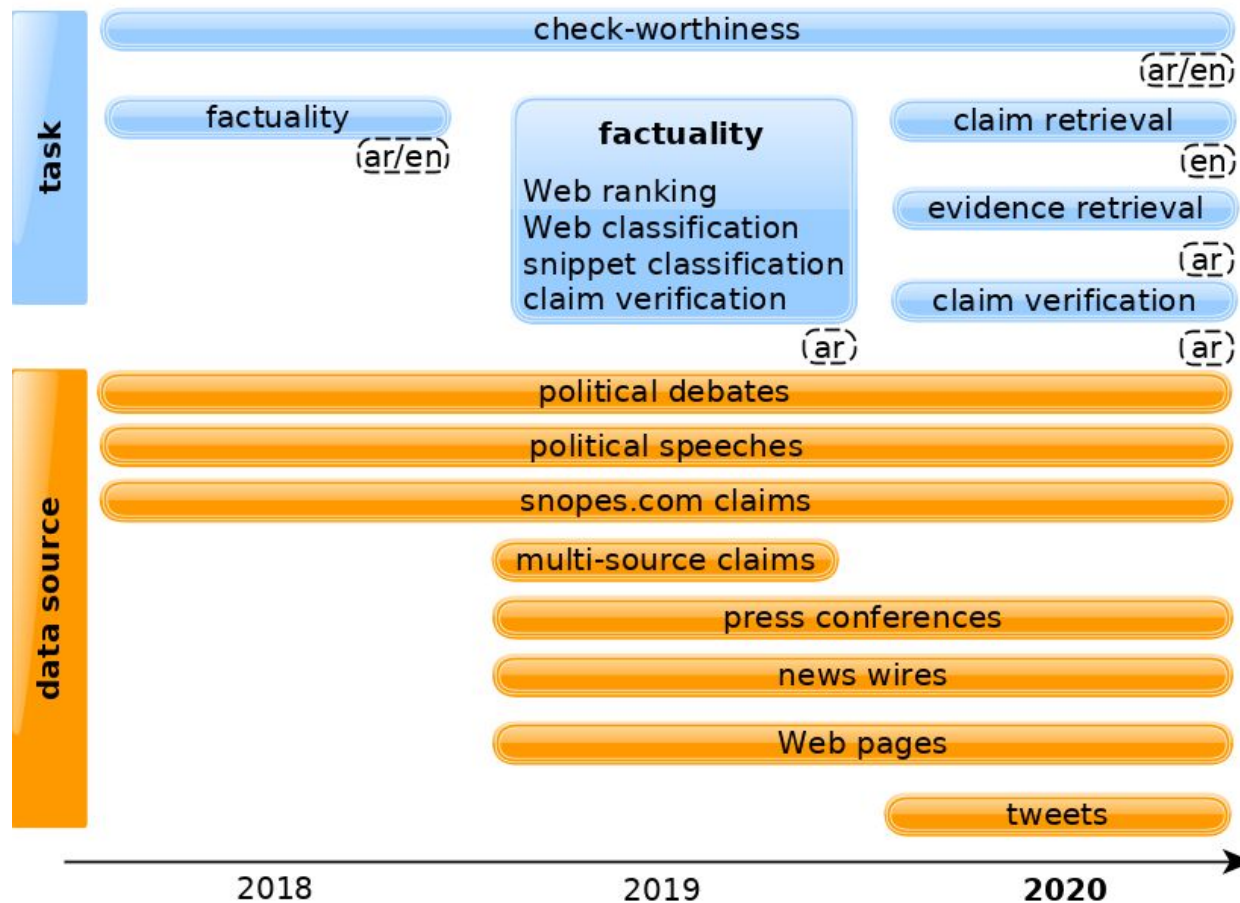
**Round table**

# Into the Future of the CheckThat! lab



(yes: CheckThat! has a new logo)

# The Evolution from 2018 to 2020



# Some of the Tasks Are Too Hard (w/o Humans)



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**Never reported  
by the media?**



 Donald J. Trump

11:11 PM · Mar 3, 2020 from Manhattan, NY · Twitter for iPhone

# Some of the Tasks Are Too Hard (w/o Humans)



POLITICS

## Trump donates his 2019 fourth-quarter salary to help combat coronavirus

PUBLISHED TUE, MAR 3 2020 3:22 PM EST | UPDATED TUE, MAR 3 2020 5:03 PM EST



Christina Wilkie  
@CHRISTINAWILKIE

SHARE    

Mar 3 2020, 3:22 pm EST



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Donald J. Trump

11:11 PM · Mar 3, 2020 from Manhattan, NY · Twitter for iPhone

11:11 pm Mar 3 from Manhattan NY

“Since this will never get reported by the media”

# In 2021, We Focus on Two Tasks

## Task 1: Check-Worthiness estimation

1A: Check-worthiness of tweets	English
1B: Check-worthiness of tweets	Arabic
1C: Check-worthiness of tweets	<b>Spanish</b>
1D: Check-worthiness of debates/speeches	English

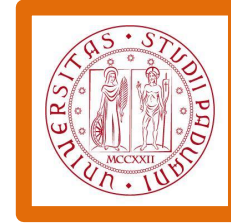
## Task 2: Detecting previously fact-checked claims

2A: Detect previously fact-checked claims from tweets	English
2B: Detect previously fact-checked claims from tweets	Arabic
2C: Detect previously fact-checked claims in political debates and speeches	English








# More Institutions are Joining the Organisation



# Let Us Virtually Meet Later Today!

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