

### Projekt 1 in a nutshell

## Menschlicher Humor ist sehr individuell...



Cattell & Luborsky, 1947



## ...und für Computer sehr schwer zu verstehen.

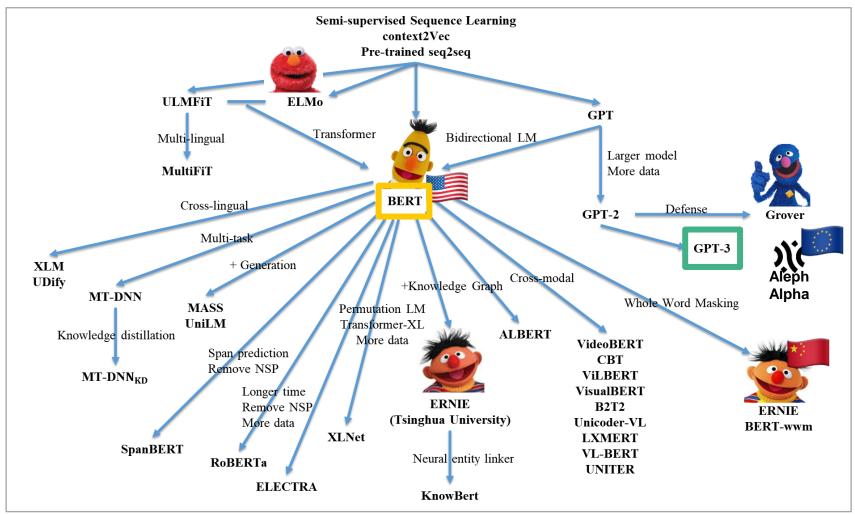
# Natural Language Processing

NLP nutzt verschiedene Ansätze, um **menschliche Sprache verarbeiten und interpretieren** zu können.

Ziel ist, dass ein Computer **Sprache semantisch** und kontextuell "verstehen" kann.







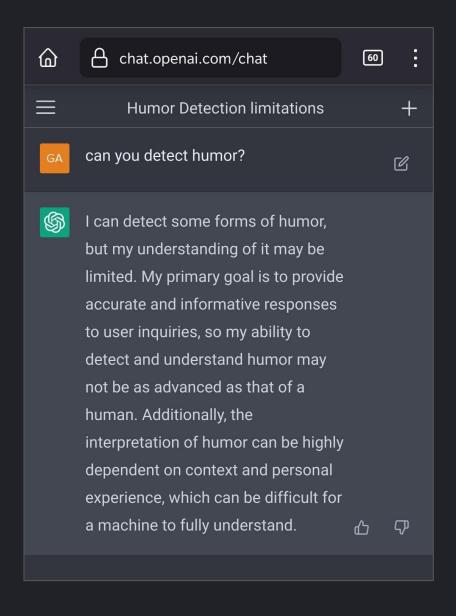
Must-Read Papers on Pre-trained Language Models – Wang & Zhang, 2019; aktualisierte Version



**ChatGPT** 



GPT-3 und GPT-4-unreleased sind nicht mehr open source



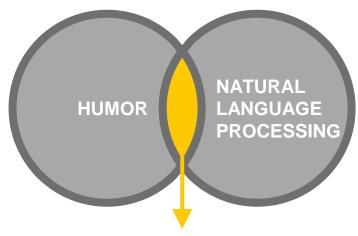
#### **Projektplan**

2022

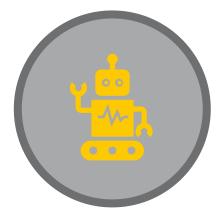
**Projekt 1** Theorie verstehen

**HEUTE** 

Projekt 2 Theorie anwenden



Humorerkennung im Natural Language Processing Humortheorie, NLP-Ansätze, Forschungsstand



"Hey Computer, ist das lustig?"
Prototypische Implementierung einer WebApp

**01**Technische Realisierung

**02**Evaluation der Ergebnisse

03
Prototypische WebApp

**01**Technische Realisierung

**02**Evaluation der Ergebnisse

**03**Prototypische WebApp

"One Liner"
Gelabelte Daten
99.965 Witze
100.001 Nicht-Witze
Englischsprachig

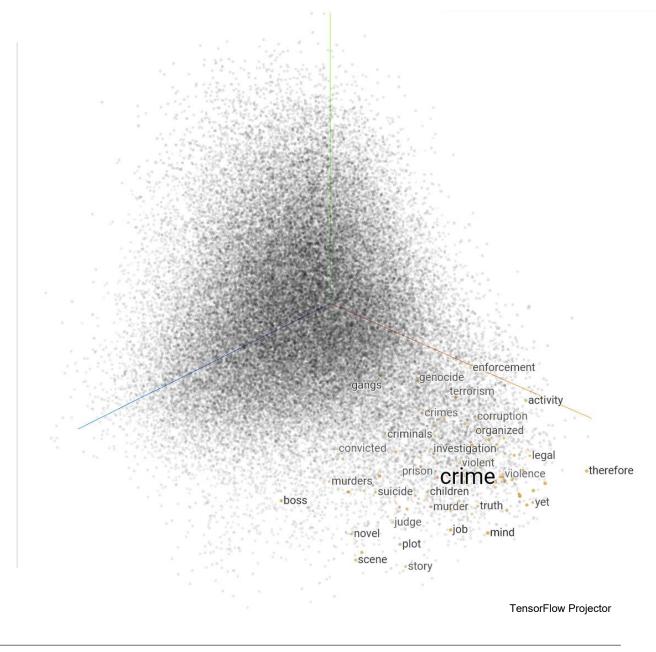
text, humor "Joe biden rules out 2020 bid: 'guys, i'm not running'",False Watch: darvish gave hitter whiplash with slow pitch, False What do you call a turtle without its shell? dead., True 5 reasons the 2016 election feels so personal, False "Pasco police shot mexican migrant from behind, new autopsy shows", False "Martha stewart tweets hideous food photo, twitter responds accordingly", False What is a pokemon master's favorite kind of pasta? wartortellini!, True Why do native americans hate it when it rains in april? because it brings mayflowers. True "Obama's climate change legacy is impressive, imperfect and vulnerable", False "My family tree is a cactus, we're all pricks.", True Donald trump has found something mysterious for rudy giuliani to do.False How donald trump and ted cruz's love affair is all relationships, False Want to know why athletes chose to #takeaknee? look at our broken justice system, False How are music and candy similar? we throw away the rappers., True Famous couples who help each other stay healthy and fit.False Study finds strong link between zika and guillain-barre syndrome, False Alec baldwin and wife hilaria welcome another baby boy, False "Trump says iran is complying with nuclear deal, but remains a dangerous threat", False Kim kardashian baby name: reality star discusses the 'k' name possibility (video), False "I just ended a 5 year relationship i'm fine, it wasn't my relationship :p",True Here's what the oscar nominations should look like, False Dating tip: surprise your date! show up a day early., True Reflections from dayos: leaders deliberate what's next for climate action after paris deal. False What do you call an explanation of an asian cooking show? a wok-through., True Swimming toward a brighter future: how i was introduced to the world of autism, False Why did little miss muffet have gps on her tuffet? to keep her from losing her whey.,True The pixelated 'simpsons' should be a real couch gag, False All pants are breakaway pants if you're angry enough, True Watch: former british open champ makes embarrassing putting fail, False Chrissy teigen's 2015 grammy dress is skintight and perfect. False "Ugh, i just spilled red wine all over the inside of my tummy.", True The next iphone update will help you save lives, False Celebrating the fourth of july with airport profiling, False "The big bend, a u-shaped skyscraper, could become the longest in the world", False Oscars 2016 red carpet: all the stunning looks from the academy awards. False Why do jews have big noses? because the air is free, True Interesting fact: by the year 2020 all actors on american tv shows will be australian., True I'd tell you a chemistry joke but i know i won't get a reaction, True Arkansas approves law to let people carry guns in bars and at public colleges, False On set with paul mitchell: from our network, False Did you know diarrhea is genetic? it runs in your jeans, True "My sons ebola joke what do africans have for breakfast? ebola cereal :) (be kind,he's only 14 lol)",True What was the sci-fi remake of a streetcar named desire? interstelllllllaaaaaaar,True What do you call a clan of barbarians you cant see? invisigoths.True

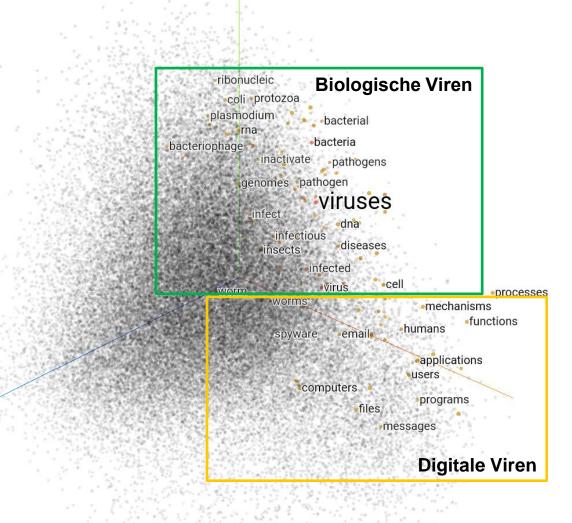
github.com/Moradnejad/ColBERT-Using-BERT-Sentence-Embedding-for-Humor-Detection

#### Beispiel

#### Word2Vec 71k

Umwandlung von 71.291 Wörtern in numerische Repräsentationen (= Vektoren), um mathematisch **Zusammenhänge der Wörter** zueinander berechnen und erkennen zu können



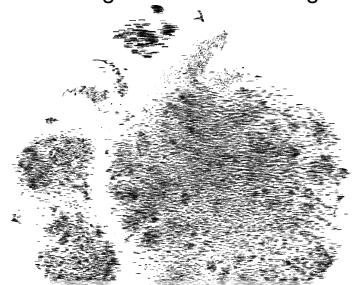


#### Word2Vec

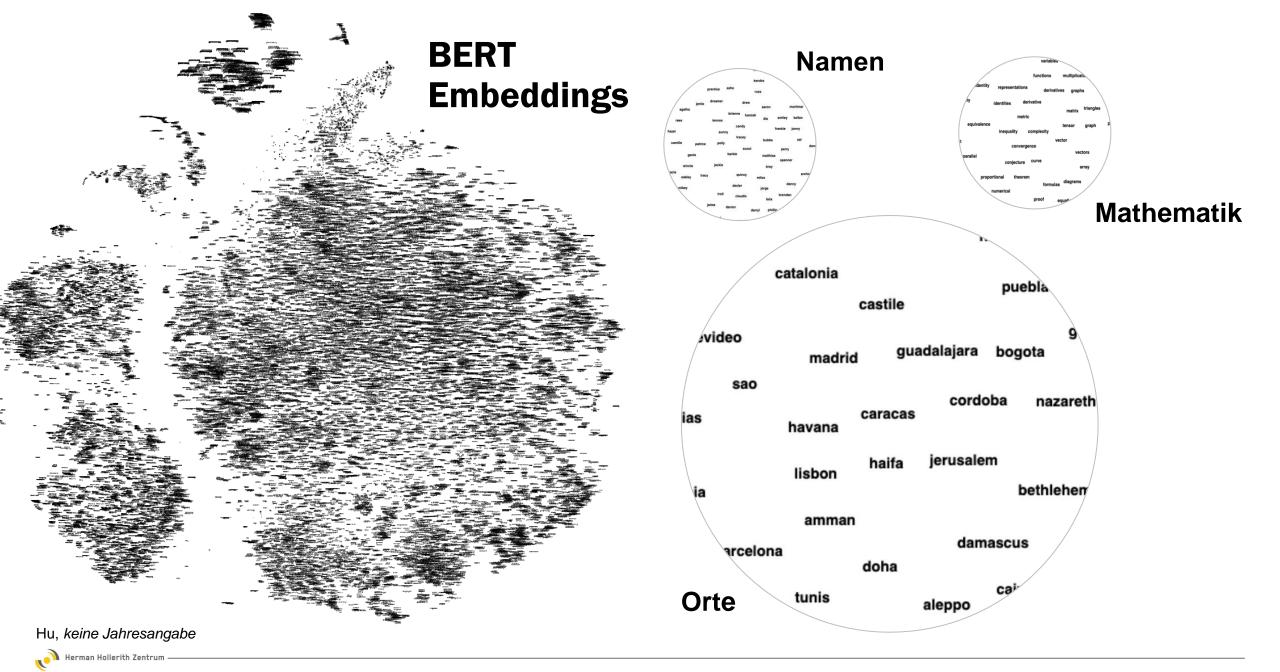
- Kontextunabhängig
  Ein Vektor (Embedding) für jedes Wort
- Reihenfolgeunabhängig
  Keine Beachtung der Wortreihenfolge

#### **BERT**

- Kontextabhängig x Vektoren (Embeddings) für jedes Wort Sitzbank vs Geldbank
- Reihenfolgeabhängig
   Beachtung der Wortreihenfolge im Satz



Sprachmodelle berechnen die kontextuellen Beziehungen zwischen Wörtern und repräsentieren damit die natürliche Sprache als Vektor. Diese Vektoren sind für den Einsatz in Deep Learning Methoden geeignet.



#### **Technische Realisierung**

The state of the s





Pre-trained Language Model smallBERT Konfigurationen



Deep Learning Model
Classifier





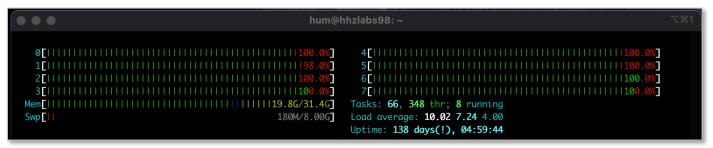




#### Kritische Reflexion der Umsetzung

#### Erkenntnis

NLP-Methoden benötigen sehr viele Ressourcen





#### Problem & Lösungsversuch

- > Limitierte Ressourcen des INF-Servers (Intel Xeon 8-core, 32GB RAM)
- > IBM Cloud: leider konnte das Skript nicht adhoc auf den GPUs initialisiert werden

```
hum@hhzlabs98
------
OS: Ubuntu 22.04.1 LTS x86_64
Host: VMware Virtual Platform None
Kernel: 5.15.0-50-generic
Uptime: 138 days, 4 hours, 54 mins
Packages: 814 (dpkg), 4 (snap)
Shell: bash 5.1.16
Resolution: 800x600
Terminal: /dev/pts/1
CPU: Intel Xeon E5-2640 0 (8) @ 2.500GHz
GPU: 00:0f.0 VMware SVGA II Adapter
Memory: 4892MiB / 32104MiB
```

#### **Output Ergebnis**

- > Automatisiertes Skript für das Pre-Processing und zum Trainieren sowie Abspeichern der Modelle
- > Sieben smallBERT Konfigurationen konnten erfolgreich trainiert werden (26 Modelle in 7 verschiedenen Konfigs)



**01**Technische Realisierung

**02**Evaluation der Ergebnisse

**03**Prototypische WebApp

#### **Evaluation der Modellgüte**

#### **Probleme**

Fehler im Python-Skript

Alle Modelle wurden <u>nur</u> mit der standardmäßigen Accuracy-Metrik gespeichert; dass weitere Metriken nicht mitgespeichert werden, war uns nicht bewusst

- → Accuracy = wie wahrscheinlich, dass Humor
- → 1 Accuracy = wie wahrscheinlich, dass kein Humor
- Fehler in der Entwicklungsumgebung

Zellen-Output ist in remote Jupyter Notebooks nicht mehr aufrufbar; somit sind die Metriken, die <u>während</u> des Trainings dargestellt worden sind, verloren gegangen

#### Lösung

- Eigene Evaluationslogik mit Testdatensatz entwickelt
- 30 Witze und 30 Nicht-Witze in englischer Sprache
- Logik Best Case Accuracy
  - → 30 Witze à 100% und 30 Nicht-Witze à 0% Accuracy
  - $\rightarrow$  Optimaler Wert = 30 (ergibt sich aus 30 \* 100% + 30 \* 0%)
  - → Summe aller 60 Accuracy-Kennzahlen pro Modell
  - → Ermittlung des Abstands zum Optimum
  - → Je kleiner der Abstand, desto höher die Modellgüte
  - → Zusätzlich farbliche Codierung der Ergebnisse



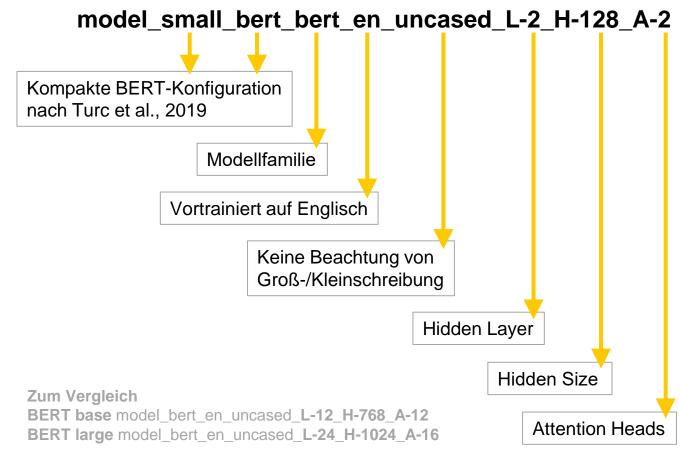
=ABS(SUMME(Accuracy)-30)

														WITZE																
GÜTE	MODELL	My wife to I	went to b I failed m	a Did vou kn I	Don't you	Two wifi e	What's the	Refusing to	Despite th 1	The rotation	A book fell I	If you don'	A ghost wa		How do yo M	lavbe if v B	uild a ma V	Vhy did th	What do vo	he troubl \	Nhy don't	I wanted n	What's the	Vhat do v	Don't spell	There's a r	Atheism is 1	The other A	Animal tes	What do vo
	model small bert		97.96% 96.079		98.46%	81.65%			41.96%	91.48%	97.67%	93.08%	97.89%	97,44%		97.34%	96.28%	97,44%	98.16%	95.11%	96.66%	98.32%	97.76%	98.16%	93.57%	97.22%	24.28%		96.99%	98.26%
	7 model small bert	98.73%	98.92% 97.369		98.58%	58,44%	98.01%	74.00%	64.25%	90.69%	98.85%	93.95%	98.92%	98.56%	98.27%	97.72%	96.47%	98.39%	98.88%	94.54%	98.26%	99.08%	98.82%	98.83%	96.40%	98.41%	24.61%	98.83%	98.06%	98.35%
	model albert en	99,44%	99.39% 97.939		98.98%	57.14%	97.58%	80.25%	54.95%	88.97%	99,40%	88.17%	99,45%	99.27%		97.14%	95.16%	98.49%	99.44%	94.54%	98.84%	99.55%	99.49%	99.53%	92.23%	98.26%	26.47%	99.39%	99.03%	98.47%
12.1	I model small bert	98.18%	98.08% 97.159	6 98.22%	98.53%	70.87%	97.91%	84.77%	61.65%	91.57%	97.54%	95.23%	98.01%	98.51%	98.41%	96.93%	95.67%	98.01%	98.42%	93.80%	98.01%	98.38%	98.35%	98.66%	95.64%	97.50%	31.64%	98.20%	97.34%	98.61%
13.1	model small bert	97.53%	97.91% 97.159	6 98.06%	98.16%	88.05%	97.82%	86.28%	83.98%	93.70%	97.90%	97.01%	97.81%	97.82%	98.40%	97.21%	97.33%	98.15%	98.40%	96.51%	97.89%	98.12%	97.96%	97.72%	97.17%	98.09%	46.50%	97.88%	97.42%	98.18%
14.6	model_small_bert	97.45%	98.11% 97.299	6 97.47%	98.38%	90.63%	98.30%	90.52%	80.12%	94.96%	97.43%	96.96%	98.09%	97.59%	97.85%	98.33%	96.31%	97.35%	97.35%	96.32%	98.36%	98.02%	98.24%	97.95%	97.36%	97.86%	55.80%	97.37%	98.21%	98.10%
15.5	model_small_bert	98.25%	97.39% 98.019	6 98.14%	98.75%	87.20%	97.03%	86.35%	68.86%	91.38%	98.14%	97.56%	97.90%	97.20%	98.46%	98.13%	93.85%	98.27%	98.26%	97.96%	98.53%	98.35%	98.69%	98.16%	93.64%	98.07%	14.80%	98.33%	97.53%	98.52%
17.2	model_small_bert	99.36%	95.77% 92.279	6 99.00%	91.97%	59.63%	73.19%	92.54%	45.68%	91.15%	98.97%	72.29%	98.21%	97.63%	99.07%	93.89%	84.38%	98.48%	99.11%	96.41%	95.68%	99.25%	99.39%	99.21%	36.40%	83.56%	33.09%	99.20%	98.71%	96.72%
17.2	model_small_bert_	99.60%	97.39% 97.749	6 99.48%	99.19%	54.57%	98.47%	73.92%	52.30%	64.99%	99.43%	91.89%	99.36%	98.39%	99.72%	98.24%	85.11%	99.66%	99.66%	89.50%	99.55%	99.51%	99.77%	99.76%	38.82%	90.87%	9.68%	99.28%	98.96%	99.50%
19.8	model_small_bert_	99.89%	68.63% 65.509	99.87%	31.62%	94.54%	39.56%	96.99%	92.86%	97.77%	99.83%	4.14%	98.52%	99.36%	99.97%	19.81%	75.86%	97.97%	99.96%	98.95%	82.78%	99.81%	99.98%	99.98%	3.69%	3.08%	89.51%	99.71%	98.04%	96.99%
20.0	model_small_bert_	99.99%	0.01% 0.009		0.01%	99.97%	0.01%		99.72%	99.99%	99.98%	0.00%	0.07%	99.98%	100.00%	0.03%		99.31%	100.00%	99.99%	99.26%	99.99%		100.00%	0.00%	0.00%	99.98%	99.99%	100.00%	99.74%
	model_small_bert_	99.76%	37.36% 69.299	99.71%	44.27%	84.69%	38.86%	97.29%	82.11%	93.50%	99.16%	31.07%	98.74%	99.63%	99.77%	71.54%	46.17%	91.67%	99.82%	98.01%	81.51%	99.77%	99.86%	99.84%	4.09%	10.51%	81.32%	99.48%	99.60%	85.67%
	model_small_bert_	99.90%	64.43% 38.139		16.09%	94.31%		99.24%	97.83%	99.58%	99.82%	1.89%	97.63%	99.98%	99.95%	7.46%	71.93%	93.82%	99.97%	99.75%	67.44%	99.89%		100.00%	1.06%	2.34%	92.74%	99.62%	99.64%	56.97%
	model_small_bert	99.73%	99.55% 98.829		99.70%	75.75%	99.52%		75.97%	98.42%	99.70%	96.89%	99.71%	99.65%	99.78%	99.38%	99.27%	99.62%	99.78%	99.49%	99.43%	99.70%	99.83%	99.79%	95.69%	99.29%	52.21%	99.66%	99.68%	99.69%
	model_small_bert	99.56%	98.97% 99.459		97.92%	94.54%	99.27%	92.74%	84.87%	96.07%	99.21%	87.94%	99.37%	98.97%	99.41%	98.44%	96.85%	99.60%	99.68%	97.14%	99.52%	99.54%	99.76%	99.67%	92.76%	97.92%	62.23%	99.53%	98.31%	99.57%
	model_small_bert_	99.54%	99.41% 99.479		99.17%	93.15%			93.06%	97.63%	99.39%	97.11%	99.63%	99.47%		99.25%	99.26%	99.58%	99.71%	97.58%	99.55%	99.55%	99.52%	99.74%	97.26%	99.28%	83.40%		98.75%	99.70%
	model_small_bert_	99.79%	98.71% 98.359		94.71%	83.36%	90.06%	97.65%	94.37%	97.66%	99.67%	70.10%	99.12%	99.39%	99.84%	98.53%	89.39%	99.69%	99.78%	99.18%	97.55%	99.77%	99.88%	99.86%	42.89%	95.17%	59.40%	99.69%	99.61%	98.63%
	model_small_bert_	99.94%	58.23% 47.989		64.23%	67.13%	73.12%	99.86%	99.15%	99.81%	99.58%	4.50%	99.11%	99.90%	99.95%	45.50%	66.10%	99.68%	99.92%	99.85%	99.67%	99.91%	99.97%	99.96%	12.50%	48.69%	99.67%	99.85%	99.90%	99.13%
	model_small_bert	99.80%	99.26% 99.469		99.47%	95.82%			91.88%	96.84%	99.63%	85.35%	99.47%	99.28%	99.84%	99.56%	97.54%	99.74%	99.88%	93.32%	99.56%	99.64%	99.93%	99.89%	83.18%	93.52%	79.45%	99.69%	99.19%	99.72%
	model_small_bert_	99.66%	99.56% 99.589		99.35%	97.52%	99.67%		89.66%	98.36%	99.63%	94.29%	99.62%	99.26%	99.68%	99.48%	99.02%	99.62%	99.73%	98.85%	99.59%	99.67%	99.71%	99.70%	98.74%	99.50%	69.35%		99.44%	99.69%
	model_small_bert	99.93%	82.22% 93.949		66.90%	90.70%	75.13%		97.09%	99.74%	99.66%	11.08%	94.51%	99.58%	99.97%	83.09%	75.91%	99.46%	99.95%	99.80%	97.62%	99.51%	99.99%	99.98%	1.34%	20.66%	99.08%	99.89%	99.90%	99.21%
	model_small_bert	99.89%	94.45% 99.499		20.85%	95.90%	89.86%	98.94%	98.16%	99.11%	99.80%	26.36%	99.52%	99.54%	99.92%	97.88%	90.39%	99.79%	99.96%	99.67%	98.35%	99.91%	99.96%	99.97%	22.66%	65.40%	93.77%	99.79%	99.81%	99.79%
	model_small_bert_	99.90%	97.27% 99.179		89.72%	87.04%	97.07%	99.62%	98.16%	99.10%	98.48%	40.95%	99.00% 99.65%	99.17%	99.92%	97.87%	94.14%	99.73%	99.94%	99.57%	99.72%	99.91% 99.80%	99.93%	99.94%	48.36% 43.85%	57.37% 50.48%	85.92%	99.38%	99.75%	
	model_small_bert	99.94% 99.85%	96.17% 97.229 99.03% 98.899		92.31% 98.62%	81.85% 98.50%	97.65% 98.51%	99.58% 96.57%	98.99% 95.25%	99.63% 97.34%	99.87% 99.79%	59.14% 75.69%	99.65%	99.65% 99.25%	99.96% 99.83%	92.10%	95.94% 98.77%	99.92% 99.57%	99.97% 99.81%	99.81% 97.43%	99.83% 99.40%	99.80%	99.99% 99.91%	99.98% 99.81%	95.24%	98.13%	96.13% 87.89%	99.61%	99.80% 99.24%	99.90% 99.39%
	model small bert	99.55%	98.98% 99.159		98.60%	94.42%			95.25%		99.79%		99.60%	99.25%		98.98%		99.63%	99.72%	98.59%	99.40%	99.57%	99.75%	99.73%	95.24%	95.05%	94.55%		99.24%	99.59%
27.0	model_smail_bert	33.3370	30.30/0 33.13.	0 33.3370	38.0070	34.42/0	30.3470	33.0376	93.0770	37.3770	99.3370	03.3770	33.0070					33.03/0	33.7270									33.3470	33.3070	33.3370
												•	NI	•				•	•		'									
GÜTE	MODELL (	Germany i C	Cost of livi Along wi	th Nowadays 1	This TF Hul	They threy	Himalayan	The centra	The Chief J	Since 2021	The start o	Julius Caes		CHT-WIT	ZE	ne town [ pa		/latko Des	In 1349: th	Farming is	The election	<u>'</u>			*			The gestat T	he univer	The city is
	MODELL (	Germany i C	Cost of livi Along wi		This TF Hul	They threy	Himalayan 40.74%	The centra 33.40%	The Chief J S	Since 2021 27.76%	The start o	Julius Caes		CHT-WIT	ZE	ne town I pa		Matko Des 58.72%	In 1349; th F	arming is 3	The electic	<u>'</u>			*			The gestat TI	he univer 1	The city is 86.85%
9.6	model_small_bert	2.90%	63.71% 3.049	4.19%		95.08%	40.74%	33.40%	8.43%	27.76%	54.09%	25.37%	NATO forn 16.77%	CHT-WIT Brussels is 2.91%	ZE The Weser Th 83.68%		andas is a N	58.72%	12.26%	59.57%	17.01%	Born into t 89.09%	However t I	1 Decemb I 29.83%	t is a conc 93.79%	He also sel 37.83%	The compa 38.07%	32.50%	58.09%	86.85%
9.6 9.7				4.19% 6 9.53%	31.66%		_	33.40%		27.76%			NATO forn	CHT-WIT Brussels is	<b>ZE</b> The Weser Th	38.79%	andas is a N					Born into t	However t I		It is a conc		The compa	32.50% 34.21%		
9.6 9.7 11.9	model_small_bert_ model_small_bert_	2.90% 5.27%	63.71% 3.049 55.73% 8.849	4.19% 9.53% 20.18%	31.66% 47.72%	95.08% 98.19%	40.74% 21.12%	33.40% 22.93%	8.43% 4.97%	27.76% 17.12%	54.09% 67.87%	25.37% 22.71%	16.77% 10.22%	CHT-WIT Brussels is 2.91% 3.46%	ZE The Weser Th 83.68% 85.81%	38.79% 45.55%	andas is a N 12.99% 16.68%	58.72% 72.68%	12.26% 34.28%	59.57% 66.15%	17.01% 20.38%	Born into t 89.09% 88.26%	However t I 55.92% 71.67%	1 Decemb I 29.83% 24.20%	t is a conc 93.79% 89.29%	He also sel 37.83% 19.20%	The compa 38.07% 50.10%	32.50% 34.21%	58.09% 19.73%	86.85% 72.34%
9.6 9.7 11.9 12.1	model_small_bert_ model_small_bert_ model_albert_en_l	2.90% 5.27% 10.00%	63.71% 3.049 55.73% 8.849 71.47% 11.129	4.19% 9.53% 20.18% 17.49%	31.66% 47.72% 49.22%	95.08% 98.19% 99.29%	40.74% 21.12% 38.87%	33.40% 22.93% 18.02%	8.43% 4.97% 7.88%	27.76% 17.12% 31.52%	54.09% 67.87% 80.31%	25.37% 22.71% 30.28%	NATO form 16.77% 10.22% 18.15%	CHT-WIT Brussels is 2.91% 3.46% 3.59%	The Weser Th 83.68% 85.81% 84.28%	38.79% 45.55% 68.52%	andas is a M 12.99% 16.68% 28.05%	58.72% 72.68% 81.92%	12.26% 34.28% 44.87%	59.57% 66.15% 80.02%	17.01% 20.38% 30.25%	Born into t 89.09% 88.26% 94.38%	However t I 55.92% 71.67% 78.52%	29.83% 24.20% 25.92%	93.79% 89.29% 94.55%	He also sel 37.83% 19.20% 32.67%	The compa 38.07% 50.10% 64.10%	32.50% 34.21% 31.63%	58.09% 19.73% 21.35%	86.85% 72.34% 80.12%
9.6 9.7 11.9 12.1 13.1	model_small_bert model_small_bert model_albert_en_l model_small_bert	2.90% 5.27% 10.00% 17.71%	63.71%     3.049       55.73%     8.849       71.47%     11.129       46.86%     10.039	4.19% 6 9.53% 6 20.18% 6 17.49% 6 10.59%	31.66% 47.72% 49.22% 19.78%	95.08% 98.19% 99.29% 91.73%	40.74% 21.12% 38.87% 64.57%	33.40% 22.93% 18.02% 15.65%	8.43% 4.97% 7.88% 5.77%	27.76% 17.12% 31.52% 32.63%	54.09% 67.87% 80.31% 76.60%	25.37% 22.71% 30.28% 17.84%	NATO forn 16.77% 10.22% 18.15% 21.42%	CHT-WIT Brussels is 2.91% 3.46% 3.59% 4.63%	The Weser The 83.68% 85.81% 84.28% 77.95%	38.79% 45.55% 68.52% 75.74%	andas is a M 12.99% 16.68% 28.05% 38.61%	58.72% 72.68% 81.92% 64.82%	12.26% 34.28% 44.87% 21.94%	59.57% 66.15% 80.02% 80.35%	17.01% 20.38% 30.25% 53.66%	Born into t 89.09% 88.26% 94.38% 86.05%	However t I 55.92% 71.67% 78.52% 49.22%	29.83% 24.20% 25.92% 31.16%	93.79% 89.29% 94.55% 91.34%	He also se 37.83% 19.20% 32.67% 62.34%	The compa 1 38.07% 50.10% 64.10% 75.61%	32.50% 34.21% 31.63% 48.91%	58.09% 19.73% 21.35% 42.65%	86.85% 72.34% 80.12% 82.15%
9.6 9.7 11.9 12.1 13.1 14.6 15.5	model_small_bert model_small_bert model_albert_en_l model_small_bert model_small_bert model_small_bert model_small_bert	2.90% 5.27% 10.00% 17.71% 13.82%	63.71% 3.049 55.73% 8.849 71.47% 11.129 46.86% 10.039 44.22% 9.469	6 4.19% 6 9.53% 6 20.18% 6 17.49% 6 10.59% 6 4.70%	31.66% 47.72% 49.22% 19.78% 58.34%	95.08% 98.19% 99.29% 91.73% 96.67%	40.74% 21.12% 38.87% 64.57% 18.99%	33.40% 22.93% 18.02% 15.65% 64.01%	8.43% 4.97% 7.88% 5.77% 6.15%	27.76% 17.12% 31.52% 32.63% 29.47%	54.09% 67.87% 80.31% 76.60% 73.91%	25.37% 22.71% 30.28% 17.84% 48.20%	NATO forn 16.77% 10.22% 18.15% 21.42% 18.81%	CHT-WIT Brussels is 2.91% 3.46% 3.59% 4.63% 11.34%	The Weser The 83.68% 85.81% 84.28% 77.95% 91.70%	38.79% 45.55% 68.52% 75.74% 41.41%	andas is a N 12.99% 16.68% 28.05% 38.61% 26.05% 15.06% 32.61%	58.72% 72.68% 81.92% 64.82% 54.66%	12.26% 34.28% 44.87% 21.94% 53.46%	59.57% 66.15% 80.02% 80.35% 70.02%	17.01% 20.38% 30.25% 53.66% 19.63%	89.09% 88.26% 94.38% 86.05% 85.87%	However t I 55.92% 71.67% 78.52% 49.22% 70.67%	29.83% 24.20% 25.92% 31.16% 57.83%	93.79% 89.29% 94.55% 91.34% 92.11%	He also sel 37.83% 19.20% 32.67% 62.34% 19.31%	The compa 38.07% 50.10% 64.10% 75.61% 65.99%	32.50% 34.21% 31.63% 48.91% 71.07%	58.09% 19.73% 21.35% 42.65% 67.77%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89%
9.6 9.7 11.9 12.1 13.1 14.6 15.5	model_small_bert, model_small_bert, model_albert_en_l model_small_bert, model_small_bert, model_small_bert, model_small_bert, model_small_bert, model_small_bert, model_small_bert, model_small_bert,	2.90% 5.27% 10.00% 17.71% 13.82% 6.72% 43.62% 66.57%	63.71% 3.04 55.73% 8.84 71.47% 11.12 46.86% 10.03 44.22% 9.46 61.27% 3.62 36.91% 34.76 92.91% 47.02	6 4.19% 6 9.53% 6 20.18% 6 17.49% 6 10.59% 6 4.70% 6 19.76% 6 64.07%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 78.86%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 98.58%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01%	NATO forn 16.77% 10.22% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62%	CHT-WIT Brussels is 2.91% 3.46% 3.59% 4.63% 11.34% 8.34% 31.29% 36.39%	The Weser The 83.68% 85.81% 84.28% 77.95% 91.70% 94.29% 95.87% 94.30%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47%	andas is a N 12.99% 16.68% 28.05% 38.61% 26.05% 15.06% 32.61% 64.97%	58.72% 72.68% 81.92% 64.82% 54.66% 66.01% 51.09% 87.31%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 22.53% 31.30%	89.09% 88.26% 94.38% 86.05% 85.87% 89.34% 89.87% 95.63%	Howevert I 55.92% 71.67% 78.52% 49.22% 70.67% 72.80% 68.25% 72.17%	29.83% 24.20% 25.92% 31.16% 57.83% 58.13% 64.67% 42.85%	93.79% 89.29% 94.55% 91.34% 92.11% 92.59% 92.26% 96.53%	He also se 37.83% 19.20% 32.67% 62.34% 19.31% 21.66% 21.98% 78.44%	The compa 1 38.07% 50.10% 64.10% 75.61% 65.99% 70.29% 61.04% 89.35%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89% 92.99%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2	model_small_bert, model_small_bert, model_albert_en_l model_small_bert,	2.90% 5.27% 10.00% 17.71% 13.82% 6.72% 43.62% 66.57% 71.93%	63.71% 3.04% 55.73% 8.84% 71.47% 11.12% 46.86% 10.03% 44.22% 9.46% 61.27% 3.62% 36.91% 34.76% 92.91% 47.02% 90.26% 24.39%	6 4.19% 6 9.53% 6 20.18% 6 17.49% 6 10.59% 6 4.70% 6 19.76% 6 64.07% 6 80.72%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 78.86% 47.15%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 98.58% 99.10%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 31.38%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34%	NATO forn 16.77% 10.22% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.81%	CHT-WIT Brussels is 2.91% 3.46% 3.59% 4.63% 11.34% 8.34% 31.29% 36.39% 38.64%	ZE The Weser Th 83.68% 85.81% 84.28% 77.95% 91.70% 94.29% 95.87% 94.30% 75.28%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20%	andas is a N 12.99% 16.68% 28.05% 38.61% 26.05% 15.06% 32.61% 64.97% 84.10%	58.72% 72.68% 81.92% 64.82% 54.66% 66.01% 51.09% 87.31% 61.51%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 83.39%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 96.37%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 22.53% 31.30% 44.44%	Born into t 89.09% 88.26% 94.38% 86.05% 85.87% 89.34% 89.87% 95.63% 98.13%	Howevert I 55.92% 71.67% 78.52% 49.22% 70.67% 72.80% 68.25% 72.17% 80.96%	29.83% 24.20% 25.92% 31.16% 57.83% 58.13% 64.67% 42.85% 62.22%	93.79% 89.29% 94.55% 91.34% 92.11% 92.59% 96.53% 99.28%	He also se 37.83% 19.20% 32.67% 62.34% 19.31% 21.66% 21.98% 78.44% 91.30%	38.07% 50.10% 64.10% 75.61% 65.99% 70.29% 61.04% 89.35% 93.07%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 71.81%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89% 92.99% 95.79%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 17.2	model_small_bert_ 7 model_small_bert_en_ 1 model_albert_en_ 1 model_small_bert_ 5 model_small_bert_ 5 model_small_bert_ 2 model_small_bert_ 2 model_small_bert_ 2 model_small_bert_ 3 model_small_bert_	2.90% 5.27% 10.00% 17.71% 13.82% 6.72% 43.62% 66.57% 71.93% 96.22%	63.71% 3.04% 55.73% 8.84% 71.47% 11.12% 46.86% 10.03% 44.22% 36.91% 34.76% 92.91% 47.02% 99.26% 24.39% 99.41% 96.88%	6 4.19% 6 9.53% 6 20.18% 6 17.49% 6 10.59% 6 4.70% 6 19.76% 6 64.07% 6 80.72% 6 98.66%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 78.86% 47.15% 97.12%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 98.58% 99.10%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 88.11%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23% 28.07%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 31.38% 80.29%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.44%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 58.46%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34% 80.41%	NATO forn 16.77% 10.22% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.81% 65.86%	CHT-WIT Brussels is 2.91% 3.46% 3.59% 4.63% 11.34% 8.34% 31.29% 36.39% 38.64% 83.28%	ZE The Wese TH 83.68% 85.81% 84.28% 77.95% 91.70% 94.29% 95.87% 94.30% 75.28% 97.12%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63%	andas is a N 12.99% 16.68% 28.05% 38.61% 26.05% 15.06% 32.61% 64.97% 84.10% 96.40%	58.72% 72.68% 81.92% 64.82% 54.66% 66.01% 51.09% 87.31% 61.51% 92.91%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 83.39% 74.04%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 96.37% 97.41%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 22.53% 31.30% 44.44% 84.85%	Born into t 89.09% 88.26% 94.38% 86.05% 85.87% 89.34% 89.87% 95.63% 98.13% 96.59%	However t I 55.92% 71.67% 78.52% 49.22% 70.67% 72.80% 68.25% 72.17% 80.96% 98.20%	29.83% 24.20% 25.92% 31.16% 57.83% 58.13% 64.67% 42.85% 62.22% 90.15%	89.29% 94.55% 91.34% 92.11% 92.59% 96.53% 99.28% 99.02%	He also se 37.83% 19.20% 32.67% 62.34% 19.31% 21.66% 21.98% 78.44% 91.30% 93.80%	The compa 38.07% 50.10% 64.10% 75.61% 65.99% 70.29% 61.04% 89.35% 93.07% 96.93%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 71.81% 73.35%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89% 92.99% 95.79% 96.08%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 17.2 19.8	model_small_bert_ 7 model_small_bert 9 model_albert_en_ 1 model_small_bert_ 5 model_small_bert_ 5 model_small_bert_ model_small_bert_ model_small_bert_ 8 model_small_bert_ 9 model_small_bert_ 9 model_small_bert_ 9 model_small_bert_	2.90% 5.27% 10.00% 17.71% 13.82% 6.72% 43.62% 66.57% 71.93% 96.22% 99.98%	63.71% 3.04% 55.73% 8.84% 71.47% 11.12% 46.86% 10.03% 44.22% 9.46% 61.27% 3.62% 36.91% 34.76% 92.91% 47.02% 90.26% 24.39% 99.41% 96.88% 100.00% 99.88%	6 4.19% 6 9.53% 6 20.18% 6 17.49% 6 10.59% 6 4.70% 6 64.07% 6 64.07% 6 80.72% 6 98.66% 6 99.98%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 78.86% 47.15% 97.12% 99.99%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 98.58% 99.10% 99.54% 99.99%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 88.11% 99.98%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23% 28.07% 99.49%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 31.38% 80.29% 99.98%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.44% 99.99%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 58.46% 99.97%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34% 80.41% 99.99%	NATO forn 16.77% 10.22% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.81% 65.86% 99.99%	CHT-WIT Brussels is 2.91% 3.46% 3.59% 4.63% 11.34% 8.34% 31.29% 38.64% 83.28% 99.64%	ZE The Wese The 83.68% 85.81% 84.28% 91.70% 94.29% 95.87% 94.30% 75.28% 99.99%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63% 99.98%	andas is a N 12.99% 16.68% 28.05% 38.61% 26.05% 15.06% 32.61% 64.97% 84.10% 99.97%	58.72% 72.68% 81.92% 64.82% 54.66% 66.01% 51.09% 87.31% 61.51% 92.91% 98.72%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 83.39% 74.04% 99.96%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 96.37% 97.41% 99.93%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 22.53% 31.30% 44.44% 84.85% 99.95%	Born into t 89.09% 88.26% 94.38% 86.05% 85.87% 89.34% 89.87% 95.63% 98.13% 96.59% 100.00%	Howevert I 55.92% 71.67% 78.52% 49.22% 70.67% 72.80% 68.25% 72.17% 80.96% 98.20% 99.99%	1 Decemb   29.83%   24.20%   25.92%   31.16%   57.83%   58.13%   64.67%   42.85%   62.22%   99.15%   99.96%	93.79% 89.29% 94.55% 91.34% 92.11% 92.26% 96.53% 99.28% 99.02%	He also se 37.83% 19.20% 32.67% 62.34% 19.31% 21.66% 21.98% 91.30% 93.80% 99.99%	The compa 38.07% 50.10% 64.10% 75.61% 65.99% 70.29% 61.04% 89.35% 93.07% 96.93% 99.99%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01% 99.98%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 71.81% 73.35% 99.99%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89% 92.99% 95.79% 96.08% 99.99%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 19.8 20.0	model_small_bert_ 7 model_small_bert 9 model_albert_en_ 1 model_small_bert 1 model_small_bert 5 model_small_bert 2 model_small_bert 3 model_small_bert 4 model_small_bert 5 model_small_bert 6 model_small_bert 7 model_small_bert 7 model_small_bert 8 model_small_bert 8 model_small_bert 8 model_small_bert 9 model_small_bert	2.90% 5.27% 10.00% 17.71% 13.82% 6.72% 43.62% 66.57% 71.93% 96.22% 99.98% 95.69%	63.71% 3.04% 55.73% 8.84% 71.47% 11.12° 46.86% 10.03° 44.22% 9.46° 61.27% 3.62° 36.91% 47.02° 90.26% 24.33° 99.41% 96.88° 100.00% 99.88°	6 4.19% 6 9.53% 6 20.18% 6 17.49% 6 10.59% 6 4.70% 6 4.07% 6 64.07% 6 80.72% 6 99.98% 6 94.63%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 78.86% 47.15% 97.12% 99.99% 91.35%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 98.58% 99.10% 99.54% 99.99%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 88.11% 99.98% 98.02%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23% 28.07% 99.49% 11.59%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 31.38% 80.29% 99.98% 94.51%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.44% 99.99% 91.98%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 58.46% 99.97% 87.29%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34% 80.41% 99.99% 95.20%	NATO forn 16.77% 10.22% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.81% 65.86% 99.99% 91.99%	CHT-WIT Brussels is 2.91% 3.46% 3.59% 4.63% 11.34% 8.34% 31.29% 38.64% 83.28% 99.64% 82.68%	ZE The Wese TH 83.68% 85.81% 84.28% 77.95% 91.70% 94.29% 95.87% 94.30% 75.28% 97.12% 99.99% 97.59%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63% 99.98% 98.50%	andas is a N 12.99% 16.68% 28.05% 38.61% 26.05% 15.06% 32.61% 64.97% 84.10% 99.97% 95.87%	58.72% 72.68% 81.92% 64.82% 54.66% 66.01% 51.09% 87.31% 61.51% 92.91% 98.72% 93.23%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 83.39% 74.04% 99.96% 97.70%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 96.37% 97.41% 99.93% 99.02%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 22.53% 31.30% 44.44% 84.85% 99.95% 84.53%	89.09% 88.26% 94.38% 86.058% 89.34% 89.87% 95.63% 98.13% 96.59% 100.00% 99.47%	However t I 55.92% 71.67% 78.52% 49.22% 70.67% 72.80% 68.25% 72.17% 80.96% 98.20% 99.99% 92.40%	1 Decemb   29.83%   24.20%   25.92%   31.16%   57.83%   58.13%   64.67%   62.22%   90.15%   99.96%   89.41%	\$1.5 a conc 93.79% 89.29% 94.55% 91.34% 92.11% 92.256% 96.53% 99.28% 99.02% 99.98% 99.70%	He also se 37.83% 19.20% 32.67% 62.34% 19.31% 21.66% 21.98% 91.30% 93.80% 99.99% 98.44%	The comps 38.07% 50.10% 64.10% 75.61% 65.99% 70.29% 61.04% 89.35% 93.07% 99.99% 98.19%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01% 99.98% 92.59%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 71.81% 73.35% 99.99% 74.81%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89% 92.99% 95.79% 96.08% 99.99% 99.40%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 17.2 20.0 20.6	model_small_bert_ 7 model_small_bert_ 9 model_small_bert_ 1 model_small_bert_ 5 model_small_bert_ 5 model_small_bert_ 6 model_small_bert_ 7 model_small_bert_ 8 model_small_bert_ 9 model_small_bert_	2.90% 5.27% 10.00% 17.71% 13.82% 6.72% 43.62% 43.62% 66.57% 71.93% 96.22% 99.98% 95.69%	63.71% 3.04 55.73% 8.84% 71.47% 11.12° 46.86% 10.03° 44.22% 9.46° 61.27% 3.62° 36.91% 34.76° 92.91% 47.02° 90.26% 24.39° 99.41% 96.88° 98.70% 71.25° 99.92% 98.36°	6 4.19% 6 9.53% 6 20.18% 6 17.49% 6 10.59% 6 4.70% 6 49.76% 6 64.07% 6 64.07% 6 99.86% 6 99.98% 6 94.63% 6 99.38%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 78.86% 47.15% 97.12% 99.99% 91.35% 96.74%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 98.58% 99.10% 99.54% 99.99% 99.62%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 76.14% 88.11% 99.98% 98.02% 96.83%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23% 28.07% 99.49% 11.59% 39.40%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 31.38% 80.29% 99.98% 94.51% 96.29%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.44% 99.99% 91.98% 99.74%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 58.46% 99.97% 87.29%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34% 80.41% 99.99% 95.20%	NATO forn 16.77% 10.22% 18.15% 21.42% 32.03% 49.44% 66.62% 46.81% 65.86% 99.99% 91.99% 86.39%	CHT-WIT Brussels is 2.91% 3.46% 3.59% 4.63% 4.63% 31.29% 36.39% 38.64% 83.28% 99.64% 82.68% 95.15%	75.28% 99.99% 99.09%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63% 99.98% 98.50% 98.56%	andas is a N 12.99% 16.68% 28.05% 38.61% 15.06% 32.61% 64.97% 84.10% 96.40% 99.97% 95.87%	58.72% 72.68% 81.92% 64.82% 54.66% 66.01% 51.09% 87.31% 61.51% 92.91% 98.72% 93.23% 87.54%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 83.39% 74.04% 99.96% 97.70% 96.23%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 96.37% 97.41% 99.93% 99.02% 98.59%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 22.53% 31.30% 44.44% 84.85% 99.95% 84.53% 99.36%	89.09% 88.26% 94.38% 86.05% 85.87% 89.34% 89.87% 95.63% 98.13% 96.09% 100.00% 99.47% 99.67%	However 1 1 55.92% 71.67% 78.52% 49.22% 70.67% 72.80% 68.25% 72.17% 80.96% 98.20% 99.99% 99.99% 99.90% 99.05%	29.83% 24.20% 25.92% 31.16% 57.83% 58.13% 64.67% 42.85% 99.15% 99.96% 89.41%	93.79% 89.29% 94.55% 91.34% 92.11% 92.59% 92.26% 96.53% 99.028% 99.028% 99.70% 99.60%	He also se 37.83% 19.20% 32.67% 62.34% 21.66% 21.98% 78.44% 91.30% 93.80% 99.99% 98.44% 99.21%	The compa 38.07% 50.10% 64.10% 75.61% 70.29% 61.04% 89.35% 93.07% 96.93% 98.19% 99.32%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01% 99.98% 92.59% 97.29%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 71.81% 73.35% 99.99% 74.81% 97.30%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89% 92.99% 96.08% 99.99% 99.40%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 19.8 20.0 20.6 20.8 21.7	model_small_bert_ 7 model_small_bert_ model_albert_en_ L model_small_bert_ model_small_bert_ 5 model_small_bert_ 6 model_small_bert_	2.90% 5.27% 10.00% 17.71% 13.82% 6.72% 43.62% 66.57% 71.93% 96.22% 99.98% 95.69% 98.99% 66.86%	63.71% 3.04° 55.73% 8.84° 71.47% 11.12° 46.86% 10.03° 44.22% 9.46° 61.27% 3.62° 36.91% 34.76° 92.91% 47.02° 99.26% 24.39° 99.41% 96.88° 100.00% 99.88° 98.70% 71.25° 99.92% 98.36° 96.17% 27.34°	6 4.19% 6 9.53% 6 20.18% 6 17.49% 6 10.59% 6 4.70% 6 19.76% 6 40.7% 6 80.72% 6 98.66% 6 99.98% 6 99.98% 6 99.38% 6 73.16%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 78.86% 47.15% 99.99% 91.35% 96.74% 73.55%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 98.58% 99.10% 99.54% 99.99% 99.62% 99.93% 99.51%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 88.11% 99.98% 98.02% 96.83% 96.03%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23% 28.07% 99.49% 11.59% 39.40% 34.51%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 31.38% 80.29% 99.98% 94.51% 96.29% 31.57%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.49% 99.99% 91.98% 99.74% 72.22%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 58.46% 99.97% 87.29% 95.95%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34% 99.99% 95.20% 96.77% 67.43%	NATO forn 16.77% 10.22% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.81% 65.86% 99.99% 86.39% 52.67%	CHT-WIT Brussels is 2.91% 3.46% 3.59% 4.63% 11.34% 31.29% 36.39% 38.64% 83.28% 99.64% 99.64% 14.48%	ZE The Wese! The 83.68% 85.81% 84.28% 77.95% 91.70% 94.29% 95.87% 94.30% 75.28% 97.12% 99.99% 96.62%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 99.68% 99.98% 98.50% 98.56% 91.19%	andas is a N 12.99% 16.68% 28.05% 38.61% 51.06% 32.61% 64.97% 84.10% 99.97% 99.97% 97.99% 88.44%	58.72% 72.68% 81.92% 64.82% 54.66% 66.01% 51.09% 87.31% 61.51% 92.91% 93.23% 87.54% 96.64%	12.26% 34.28% 44.87% 21.94% 53.46% 50.22% 87.41% 83.39% 74.04% 99.96% 97.70% 96.23% 77.00%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 96.37% 99.93% 99.02% 98.59% 98.63%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 22.53% 31.30% 44.44% 99.95% 84.53% 99.36% 68.37%	89.09% 88.26% 94.36% 95.67% 85.87% 89.34% 89.87% 99.6.39% 100.0% 99.67% 99.67%	55.92% 71.67% 78.52% 49.22% 70.67% 72.80% 68.25% 72.17% 80.96% 98.20% 99.99% 92.40% 98.05% 87.20%	1 Decemb 1 29.83% 24.20% 25.92% 31.16% 58.13% 64.67% 42.85% 62.22% 99.95% 99.95% 99.93% 76.29%	93.79% 89.29% 94.55% 91.34% 92.11% 92.26% 96.53% 99.28% 99.02% 99.90% 99.90% 99.90%	He also set 37.83% 19.20% 62.34% 19.31% 21.66% 21.98% 78.44% 91.30% 99.99% 98.44% 87.90%	38.07% 50.10% 64.10% 75.61% 65.99% 70.29% 61.04% 89.35% 93.07% 96.93% 99.99% 98.19% 99.32%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01% 99.98% 92.59% 97.29% 55.77%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 71.81% 99.99% 74.81% 97.30% 78.01%	86.85% 72.34% 80.12% 82.15% 82.00% 91.89% 92.99% 95.79% 96.08% 99.99% 99.40% 99.74%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 17.2 19.8 20.0 20.6 20.8 21.7 23.5	model_small_bert_ 7 model_small_bert_en_ 1 model_albert_en_ 1 model_small_bert_ 5 model_small_bert_ 5 model_small_bert_ 7 model_small_bert_ 8 model_small_bert_ 9 model_small_bert_	2.90% 5.27% 10.00% 17.71% 13.82% 6.72% 43.62% 66.57% 71.93% 96.22% 99.88% 95.69% 66.86% 87.20%	63.71% 3.04% 55.73% 8.84% 71.47% 11.12% 46.86% 10.03% 44.22% 9.46% 61.27% 3.62% 36.91% 34.76% 92.91% 47.02% 99.12% 99.88% 100.00% 99.88% 98.70% 71.25% 99.92% 98.36% 96.17% 27.34% 94.81% 91.18%	6 4.19% 6 9.53% 6 20.18% 6 10.59% 6 10.59% 6 4.70% 6 19.76% 6 40.77% 6 80.72% 6 98.66% 6 99.98% 6 94.63% 6 73.16% 6 74.85%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 78.86% 47.15% 97.12% 99.9% 91.35% 82.00%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 98.58% 99.10% 99.54% 99.99% 99.62% 99.93% 99.51% 99.41%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 64.36% 80.85% 76.14% 88.11% 99.98% 98.02% 96.03% 91.16%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 28.07% 99.49% 11.59% 39.40% 45.04%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 31.38% 80.29% 99.98% 94.51% 31.57% 21.16%	27.76% 17.12% 31.52% 32.63% 29.47% 60.85% 47.47% 73.25% 99.44% 99.99% 91.98% 72.22% 96.46%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 58.46% 99.97% 87.29% 95.95% 95.18% 92.49%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34% 80.41% 99.99% 95.20% 67.74% 42.54%	NATO form 16.77% 10.22% 18.15% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.81% 65.86% 99.99% 91.99% 86.39% 52.67% 76.28%	CHT-WIT Brussels is 2.91% 3.46% 3.59% 4.63% 11.34% 8.34% 31.29% 38.64% 83.28% 99.64% 82.68% 95.15% 67.01%	ZE The Wese The 83.68% 85.81% 84.28% 91.70% 94.29% 95.87% 94.30% 97.12% 99.99% 97.59% 99.09% 96.62% 85.69%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63% 99.98% 99.856% 91.19% 94.93%	andas is a N 12.99% 16.68% 28.05% 38.61% 26.05% 15.06% 32.61% 64.97% 84.10% 99.97% 99.97% 97.99% 88.44% 91.98%	58.72% 72.68% 81.92% 64.82% 54.66% 66.01% 51.09% 87.31% 61.51% 92.91% 98.72% 93.23% 87.54% 96.64%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 83.39% 74.04% 99.66% 97.70% 96.23% 77.00%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 87.66% 96.37% 99.33% 99.02% 98.59% 98.63% 97.36%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 22.53% 31.30% 44.44% 84.85% 99.95% 84.53% 99.36% 68.37% 80.86%	89.09% 88.26% 94.38% 94.38% 85.87% 89.87% 95.63% 96.59% 100.00% 99.47% 99.67% 99.15%	71.67% 78.52% 71.67% 78.52% 49.22% 70.67% 72.80% 68.25% 72.17% 80.96% 98.20% 99.99% 99.99% 98.05% 87.20%	1 Decemb 1 29.83% 24.20% 25.92% 31.16% 57.83% 64.67% 42.85% 602.22% 90.15% 99.96% 89.41% 99.23% 76.29% 70.49%	93.79% 89.29% 94.55% 91.34% 92.11% 92.59% 96.26% 99.28% 99.02% 99.98% 99.70% 99.60%	He also set 37.83% 19.20% 32.67% 62.34% 19.31% 21.66% 21.98% 78.44% 93.80% 99.99% 98.44% 99.21% 87.90% 55.38%	38.07% 50.10% 64.10% 75.61% 65.99% 70.29% 61.04% 89.35% 99.99% 98.19% 99.32% 94.49% 92.65%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 61.27% 41.32% 76.01% 99.98% 92.59% 97.29% 55.77% 77.62%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 71.81% 73.35% 99.99% 74.81% 74.81% 97.30% 78.01%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89% 92.99% 95.79% 99.08% 99.40% 99.40% 98.48% 96.50%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 19.8 20.0 20.6 20.8 21.7 23.5 23.6	model_small_bert_ 7 model_small_bert_en_ 9 model_albert_en_ 1 model_small_bert_ 5 model_small_bert_ 5 model_small_bert_ 6 model_small_bert_ 7 model_small_bert_ 8 model_small_bert_ 9 model_small_bert_ 9 model_small_bert_ 1 model_small_bert_ 9 model_small_bert_	2.90% 5.27% 10.00% 17.71% 6.72% 43.62% 66.57% 71.93% 96.22% 99.98% 95.69% 98.99% 66.86% 87.20% 82.34%	63.71% 3.04 55.73% 8.84 71.47% 11.12; 46.86% 10.03; 44.22% 9.46; 61.27% 3.62; 36.91% 34.76; 92.91% 47.02; 90.26% 24.39; 99.41% 96.88; 100.00% 99.88; 98.70% 71.25; 99.92% 98.36; 96.17% 27.34; 94.81% 91.18; 94.81% 91.18;	6 4.19% 6 9.53% 6 20.18% 6 10.59% 6 4.70% 6 19.76% 6 64.07% 6 64.07% 6 99.98% 6 99.98% 6 99.38% 6 99.38% 6 74.85% 6 70.49%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 47.15% 99.99% 91.35% 96.74% 73.55% 82.00% 69.72%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 98.58% 99.10% 99.54% 99.99% 99.62% 99.93% 99.41% 99.00%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 99.98% 98.02% 96.83% 96.03% 91.16% 84.50%	33.40% 22.93% 18.02% 15.65% 64.01% 4.28% 74.01% 4.28% 79.49% 11.59% 39.40% 34.51% 66.57%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 31.38% 99.98% 94.51% 96.29% 31.57% 21.16% 12.37%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.44% 99.99% 91.98% 99.74% 86.26%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 99.97% 87.29% 95.18% 95.18% 87.58%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 86.01% 56.34% 80.41% 99.99% 95.20% 96.77% 42.54% 65.89%	NATO form 16.77% 10.22% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.81% 65.86% 99.99% 91.99% 86.39% 52.67% 44.81%	CHT-WIT Brussels is 2.91% 3.46% 3.59% 4.63% 11.34% 8.34% 31.29% 36.39% 38.64% 83.28% 99.64% 82.68% 95.15% 14.48% 67.01% 82.00%	7E 83.68% 85.81% 84.28% 77.95% 91.70% 94.29% 94.30% 75.28% 97.12% 99.99% 97.59% 99.09% 85.69% 94.01%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63% 99.98% 98.56% 99.1.19% 94.93% 79.40%	12.99% 16.68% 28.05% 38.61% 26.05% 15.06% 32.61% 64.97% 84.10% 96.40% 99.97% 95.87% 97.99% 88.44% 91.98% 83.53%	58.72% 72.68% 81.92% 64.82% 54.66% 66.01% 87.31% 61.51% 92.91% 98.72% 93.23% 87.54% 84.00% 91.52%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 83.39% 99.96% 97.70% 96.23% 77.00% 96.33% 93.43% 93.43%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 87.66% 96.37% 99.93% 99.02% 98.59% 97.36% 94.76%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 44.44% 84.85% 99.95% 84.53% 99.36% 80.86% 58.33%	89.09% 88.26% 94.38% 86.05% 85.87% 89.34% 99.63% 98.13% 96.59% 100.00% 99.47% 99.67% 99.15% 99.59% 92.44%	However t 1 55.92% 71.67% 78.52% 49.22% 70.67% 72.80% 68.25% 72.17% 80.96% 98.20% 99.99% 97.40% 98.05% 87.20% 98.05% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 8	1 Decemb 1 29.83% 24.20% 25.92% 31.16% 57.83% 58.13% 64.67% 42.85% 99.96% 89.41% 99.23% 76.29% 70.49% 86.71%	93.79% 89.29% 94.55% 91.34% 92.11% 92.26% 96.53% 99.28% 99.02% 99.98% 99.70% 99.60% 99.60% 99.17%	He also se, 37.83% 19.20% 19.20% 62.34% 19.31% 21.66% 91.30% 93.80% 99.99% 98.44% 99.21% 87.90% 55.38% 80.85%	75.61% 65.99% 70.29% 61.04% 89.35% 99.37% 96.93% 99.19% 94.49% 94.49% 94.04%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01% 99.98% 92.59% 97.29% 55.77% 77.62% 74.68%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 47.81% 71.81% 73.35% 99.99% 74.81% 97.30% 97.30% 97.30% 91.91% 83.52%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89% 95.79% 96.08% 99.99% 99.40% 99.44% 98.48% 96.50%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 19.8 20.0 20.6 20.8 21.7 23.5 23.6 23.9	model_small_bert_ model_small_	2.90% 5.27% 10.00% 17.71% 6.72% 43.62% 66.57% 71.93% 99.23% 99.98% 95.69% 98.99% 66.86% 87.20% 82.34% 96.79%	63.71% 3.04 55.73% 8.84 71.47% 11.12; 46.86% 10.03; 44.22% 9.46; 61.27% 3.62; 36.91% 47.02; 90.26% 24.39; 90.26% 24.39; 99.41% 96.88; 100.00% 99.88; 98.70% 71.25; 99.92% 98.36; 96.17% 27.34; 94.81% 91.18; 92.53% 88.66; 98.86% 67.29;	6 4.19% 6 9.53% 6 20.18% 6 10.59% 6 10.59% 6 4.70% 6 49.76% 6 64.07% 6 98.66% 6 99.98% 6 94.63% 6 99.38% 6 73.16% 6 70.49% 6 70.49%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 78.86% 47.15% 99.99% 91.35% 96.74% 73.55% 82.00% 69.72% 74.59%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 98.58% 99.10% 99.54% 99.99% 99.52% 99.93% 99.51% 99.41%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 88.11% 99.98% 98.02% 96.83% 96.03% 91.16% 84.50%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23% 28.07% 99.49% 11.59% 39.40% 34.51% 45.04% 66.57% 16.89%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 31.38% 80.29% 99.98% 94.51% 96.29% 31.57% 21.16% 67.55%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.44% 99.99% 91.98% 99.74% 72.22% 96.46% 86.26% 86.33%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 99.97% 87.29% 95.95% 95.18% 92.49% 87.58% 98.80%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34% 89.41% 99.99% 95.20% 67.7% 67.43% 42.54% 66.24%	NATO form 16.77% 10.22% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.81% 65.86% 99.99% 86.39% 52.67% 76.28% 44.81% 86.75%	CHT-WIT Brussels is 2,91% 3.46% 3.46% 4.63% 11.34% 8.34% 31.29% 36.39% 38.64% 83.28% 99.64% 82.68% 95.15% 14.48% 67.01% 82.00% 76.07%	71	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63% 99.98% 98.50% 98.56% 91.19% 94.93% 94.93%	12.99% 16.68% 28.05% 38.61% 26.05% 15.06% 32.61% 64.97% 84.10% 96.40% 99.97% 88.44% 91.98% 88.44% 91.98% 95.47%	58.72% 72.68% 81.92% 64.82% 54.66% 66.01% 51.09% 87.31% 61.51% 92.91% 98.72% 93.23% 87.54% 96.64% 84.00% 91.52% 95.22%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 83.39% 74.04% 99.96% 97.70% 96.23% 77.00% 93.43% 98.29%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 96.37% 99.93% 99.02% 98.59% 97.36% 97.36% 97.36%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 22.53% 31.30% 44.44% 84.85% 99.95% 84.53% 99.36% 68.37% 80.86% 99.06%	89.09% 88.26% 88.26% 86.05% 85.87% 89.87% 99.63% 90.59% 100.00% 99.47% 99.55% 99.55% 99.44%	However t 1 55.92% 71.67% 78.52% 49.22% 70.67% 72.80% 68.25% 72.17% 80.96% 98.20% 99.99% 87.20% 98.05% 87.20% 87.20% 87.20% 87.20% 87.20%	1 Decemb   29.83%   24.20%   25.92%   31.16%   57.83%   58.13%   64.87%   62.22%   99.15%   99.23%   76.29%   70.49%   86.71%   80.96%	93.79% 89.29% 94.55% 91.34% 92.11% 92.59% 95.26% 96.653% 99.28% 99.98% 99.97% 99.60% 99.46% 99.02%	He also se 37.83% 19.20% 32.67% 62.34% 19.31% 21.66% 21.98% 78.44% 91.30% 99.84% 99.21% 87.90% 55.38% 80.85%	38.07% 50.10% 64.10% 75.61% 65.99% 70.29% 61.04% 89.35% 93.07% 96.93% 99.99% 98.19% 99.32% 94.49% 92.65% 94.04% 94.84%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01% 99.98% 92.59% 97.29% 55.77% 77.62% 91.50%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 71.81% 73.35% 99.99% 74.81% 97.30% 78.01% 91.91% 83.52% 72.90%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89% 95.79% 99.40% 99.74% 98.48% 96.50% 95.24% 98.40%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 19.8 20.0 20.6 20.8 21.7 23.5 23.6 23.9 24.4	model_small_bert_ 7 model_allbert_en_ Look and allbert_en_ Look and allbert_ Look and allbert_en_ Look and allbert_en_ Look and allbert_ Look and allbert_en_ Look and all all all all all all all all all al	2.90% 5.27% 10.00% 17.71% 13.82% 6.72% 43.62% 66.57% 71.93% 96.22% 99.88% 95.69% 98.99% 66.86% 87.20% 82.34% 96.79%	63.71% 3.04° 55.73% 8.84° 71.47% 11.12° 46.86% 10.03° 44.22% 9.46° 61.27% 3.62° 36.91% 34.76° 99.1% 47.02° 99.1% 96.88° 100.00% 99.88° 98.70% 71.25° 99.92% 98.36° 96.17% 27.34° 94.81% 91.18° 92.53% 88.66° 98.86% 96.65°	6 4.19% 6 9.53% 6 9.53% 6 17.49% 6 10.59% 6 4.70% 6 19.76% 6 80.72% 6 99.98% 6 99.98% 6 73.16% 6 74.85% 7 70.49% 6 99.70%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 78.86% 47.15% 97.12% 99.99% 91.35% 96.74% 73.55% 82.00% 69.72% 74.59% 99.50%	95.08% 98.19% 99.29% 91.73% 96.67% 96.67% 96.96% 98.58% 99.10% 99.54% 99.99% 99.62% 99.93% 99.51% 99.41% 99.44% 99.91%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 88.11% 99.98% 98.02% 96.03% 91.16% 84.50% 94.55% 99.78%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23% 28.07% 99.49% 11.59% 34.51% 45.04% 66.57% 16.89% 85.85%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 80.29% 99.98% 94.51% 96.29% 31.57% 21.16% 12.37% 67.55% 99.04%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.44% 99.99% 91.98% 99.74% 72.22% 96.46% 86.26% 86.33% 99.39%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 58.46% 99.97% 87.29% 95.18% 92.49% 87.88% 98.80% 97.65%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 55.34% 99.99% 95.20% 96.77% 67.43% 42.54% 65.89% 66.24% 99.55%	NATO form 16.77% 10.22% 18.15% 18.15% 18.81% 32.03% 49.44% 65.62% 46.81% 65.86% 99.99% 91.99% 52.67% 76.28% 44.81% 86.75% 99.70%	CHT-WIT Brussels is 2.91% 3.46% 3.45% 4.63% 11.34% 8.34% 31.29% 36.39% 38.64% 83.28% 99.64% 82.68% 67.01% 82.00% 76.07% 98.86%	7.5% 91.2% 99.9% 96.62% 85.69% 99.86% 75.8% 99.86%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63% 99.98% 98.50% 94.93% 79.40% 94.93% 99.62%	andas is a N 12.99% 16.68% 28.05% 38.61% 26.05% 15.06% 32.61% 64.97% 84.10% 96.40% 99.97% 95.87% 97.99% 88.44% 91.98% 83.53% 95.47% 92.83%	58.72% 72.68% 81.92% 64.82% 54.66% 51.09% 87.31% 61.51% 92.91% 93.23% 87.54% 96.64% 84.00% 91.52% 95.22%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 83.39% 74.04% 99.96% 97.70% 96.23% 77.00% 93.43% 93.43% 98.29% 96.88%	59.57% 66.15% 80.02% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 96.37% 97.41% 99.93% 99.02% 98.63% 94.76% 99.33% 99.82%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 22.53% 31.30% 44.44% 84.85% 99.95% 84.53% 99.36% 68.37% 80.86% 58.33% 90.06%	89.09% 89.26% 89.26% 85.87% 85.87% 89.34% 89.63% 98.13% 90.59% 100.00% 99.67% 99.59% 99.59% 99.59%	55.92% 71.67% 78.52% 49.22% 70.67% 72.80% 68.25% 72.17% 80.96% 98.20% 99.99% 92.40% 87.21% 95.83% 87.21% 95.83%	1 Decemb   29.83%   24.20%   25.92%   31.16%   57.83%   58.13%   642.85%   62.22%   90.15%   99.96%   89.41%   70.49%   86.71%   80.96%   97.71%	93.79% 89.29% 94.55% 91.34% 92.11% 92.59% 92.65% 99.28% 99.02% 99.90% 99.00% 99.00% 99.00% 99.00% 99.00%	He also set 37.83% 19.20% 62.34% 19.31% 21.66% 21.98% 91.30% 93.80% 99.94% 99.21% 87.90% 55.38% 80.85% 83.69% 99.25%	38.07% 50.10% 64.10% 75.61% 65.99% 70.29% 61.04% 89.35% 93.07% 99.99% 99.32% 94.49% 92.65% 94.04% 94.84% 99.56%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01% 99.98% 92.59% 97.29% 55.77% 77.62% 74.68% 99.150%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 73.35% 99.99% 74.81% 97.30% 78.01% 91.91% 83.52% 98.56%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89% 92.99% 96.08% 99.99% 99.40% 98.48% 96.50% 99.84%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 19.8 20.0 20.6 20.8 21.7 23.5 23.6 23.9 24.4	model_small_bert_ 7 model_small_bert_ 1 model_albert_en_ 1 model_amall_bert_ 1 model_small_bert_ 5 model_small_bert_ 6 model_small_bert_ 7 model_small_bert_ 8 model_small_bert_ 9 model_small_bert_ 10 model_small_bert_ 11 model_small_bert_ 11 model_small_bert_ 12 model_small_bert_ 13 model_small_bert_ 14 model_small_bert_ 15 model_small_bert_ 16 model_small_bert_ 17 model_small_bert_ 18 model_small_bert_ 18 model_small_bert_ 18 model_small_bert_ 18 model_small_bert_ 18 model_small_bert_	2.90% 5.27% 10.00% 17.71% 13.82% 6.72% 43.62% 66.57% 71.93% 96.22% 99.98% 95.69% 98.99% 87.20% 82.34% 96.79% 87.76%	63.71% 3.04° 55.73% 8.84° 71.47% 11.12° 46.86% 10.03° 44.22% 36.91% 34.76° 92.91% 47.02° 99.1% 99.88° 100.00% 99.88° 98.70% 71.25° 99.92% 99.36° 96.17% 27.34° 94.81% 91.18° 92.53% 88.66° 67.29° 99.86% 67.29° 99.86% 96.65°	6 4.19% 6 9.53% 6 20.18% 6 17.49% 6 10.59% 6 4.70% 6 19.76% 6 64.07% 6 98.66% 6 99.98% 6 99.38% 6 73.16% 6 74.85% 6 70.49% 6 99.70% 6 99.70%	31.66% 47.72% 49.22% 19.78% 79.12% 55.04% 78.86% 47.15% 97.12% 99.99% 91.35% 82.00% 69.72% 74.59% 99.50% 91.94%	95.08% 98.19% 91.73% 96.67% 97.38% 96.96% 98.58% 99.10% 99.54% 99.99% 99.62% 99.93% 99.51% 99.41% 99.41% 99.94% 99.24%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 88.11% 99.98% 98.02% 96.63% 91.16% 84.50% 94.55% 99.78%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23% 28.07% 99.49% 11.59% 39.40% 45.04% 66.57% 16.85% 42.67%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 31.38% 80.29% 99.98% 94.51% 96.29% 21.16% 12.37% 67.55% 59.06%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.44% 99.99% 91.98% 99.74% 72.22% 96.46% 86.26% 86.33% 99.39% 96.48%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 58.46% 99.97% 87.29% 95.95% 95.18% 92.49% 87.58% 98.80% 97.65%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34% 99.99% 95.20% 96.77% 67.43% 42.54% 65.89% 66.24% 99.95% 75.94%	NATO form 16.77% 10.22% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.81% 65.86% 99.99% 91.99% 52.67% 76.28% 44.81% 86.75% 99.70% 35.23%	CHT-WIT Brussels is 2.91% 3.46% 3.59% 4.63% 11.34% 8.34% 31.29% 38.64% 83.28% 99.64% 82.68% 99.15% 14.48% 67.01% 82.00% 76.07% 98.86% 75.89%	75.28% 99.99% 96.62% 99.45% 97.45%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63% 99.98% 98.50% 98.56% 91.19% 94.93% 79.40% 94.34% 99.62% 95.09%	andas is a N 12.99% 16.68% 28.05% 15.06% 32.61% 64.97% 84.10% 99.97% 99.97% 91.98% 83.53% 91.98% 83.53% 95.47%	58.72% 72.68% 81.92% 64.82% 66.01% 51.09% 87.31% 61.51% 92.91% 98.72% 96.64% 84.00% 91.52% 96.14%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 87.41% 99.96% 97.70% 96.23% 97.00% 93.43% 98.29% 96.88% 85.15%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 99.33% 99.02% 98.59% 98.63% 97.36% 99.36% 99.33% 99.32%	17.01% 20.38% 30.25% 53.66% 19.63% 22.53% 31.30% 84.85% 99.95% 84.53% 99.95% 80.86% 58.33% 90.06% 97.73% 67.71%	89.09% 89.26% 98.605% 85.87% 89.34% 89.87% 99.639% 100.00% 99.47% 99.559% 99.559% 92.44% 99.73% 99.73%	71.67% 78.52% 70.67% 72.80% 68.25% 72.17% 80.96% 98.20% 99.99% 92.40% 95.83% 87.21% 87.25% 87.25%	1 Decemb 1 29.83% 24.20% 25.92% 25.92% 57.83% 58.13% 64.67% 42.85% 62.22% 90.15% 99.96% 89.41% 80.96% 86.71% 80.96% 97.71% 67.69%	93.79% 89.29% 94.55% 91.34% 92.11% 92.59% 99.28% 99.02% 99.98% 99.70% 99.46% 99.02% 99.17% 99.17% 99.82%	He also sel 37.83% 19.20% 32.67% 19.31% 21.66% 21.98% 78.44% 91.30% 93.80% 99.91% 87.90% 55.38% 80.85% 83.69%	38.07% 50.10% 64.10% 75.61% 65.99% 70.29% 61.04% 89.35% 93.07% 96.93% 99.19% 99.32% 94.49% 92.65% 94.04% 94.84% 94.84% 93.60%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01% 99.98% 92.59% 97.29% 77.62% 74.68% 91.50% 99.70% 93.46%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 73.35% 99.99% 74.81% 97.30% 78.01% 91.91% 83.52% 72.90% 98.56% 76.70%	86.85% 72.34% 80.12% 82.15% 82.00% 91.89% 92.99% 95.79% 96.08% 99.99% 99.40% 99.74% 98.48% 96.50% 99.24% 98.48%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 19.8 20.0 20.6 20.8 21.7 23.5 23.6 23.9 24.4 24.5 24.5	model_small_bert_ 7 model_small_bert_ 9 model_albert_en_ 1 model_small_bert_ 1 model_small_bert_ 5 model_small_bert_ 6 model_small_bert_ 7 model_small_bert_ 8 model_small_bert_ 9 model_small_bert_	2.90% 5.27% 10.00% 17.71% 6.72% 43.62% 66.57% 71.93% 96.22% 99.98% 95.69% 87.20% 82.34% 96.79% 99.76% 87.76%	63.71% 3.04° 55.73% 8.84° 71.47% 11.12° 46.86% 10.03° 44.22% 9.46° 61.27% 3.62° 36.91% 34.76° 92.91% 47.02° 99.1% 96.88° 100.00% 99.88° 98.70% 71.25° 99.92% 98.36° 96.17% 91.18° 92.53% 88.66° 98.86% 67.29° 99.86% 96.65° 97.70% 91.16°	6 4.19% 6 9.53% 6 20.18% 6 10.59% 6 10.59% 6 4.70% 6 19.76% 6 40.77% 6 80.72% 6 98.66% 6 99.98% 6 94.63% 6 73.16% 6 74.85% 6 70.49% 6 99.703% 6 99.703% 6 99.703% 6 94.61%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 78.86% 47.15% 97.12% 99.99% 91.35% 96.74% 73.55% 82.00% 69.72% 74.59% 99.50% 91.94% 80.47%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 99.54% 99.99% 99.62% 99.93% 99.51% 99.41% 99.00% 99.44% 99.91%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 88.11% 99.98% 98.02% 96.03% 91.16% 84.50% 94.55% 99.78%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23% 28.07% 99.49% 11.59% 39.40% 34.51% 66.57% 16.89% 85.85% 42.67% 50.19%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 31.38% 80.29% 99.98% 94.51% 96.29% 31.57% 21.16% 12.37% 67.55% 99.04% 58.06% 55.85%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.44% 99.99% 91.98% 99.74% 72.22% 96.46% 86.33% 99.39% 96.48% 84.69%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 87.29% 99.97% 87.29% 95.18% 92.49% 87.58% 98.80% 97.65% 95.95%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34% 99.99% 95.20% 96.77% 67.43% 42.54% 65.89% 66.24% 99.55% 75.94% 82.61%	NATO form 16.77% 10.22% 18.15% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.81% 65.86% 99.99% 86.39% 52.67% 76.28% 44.81% 86.75% 99.70%	CHT-WIT Brussels is 2,91% 3.46% 3.46% 4.63% 4.63% 4.134% 8.34% 36.39% 38.64% 82.68% 95.15% 14.48% 67.01% 82.00% 76.07% 98.86% 75.89% 52.78%	7E 83.68% 85.81% 84.28% 77.95% 91.70% 94.29% 94.30% 75.28% 97.12% 99.99% 97.59% 99.09% 96.62% 85.69% 94.01% 98.23% 97.45% 97.25%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63% 99.98% 98.50% 98.50% 94.93% 79.40% 94.34% 99.62% 99.509% 94.25%	12.99% 16.68% 28.05% 38.61% 26.05% 15.06% 32.61% 64.97% 84.10% 96.40% 99.97% 97.99% 88.44% 97.99% 88.44% 95.47% 92.83% 95.47% 92.83%	58.72% 72.68% 81.92% 64.82% 54.66% 66.01% 51.09% 87.31% 61.51% 98.72% 93.23% 87.54% 96.64% 84.00% 91.52% 98.57% 96.14% 86.03%	12.26% 34.28% 44.87% 21.94% 34.14% 50.22% 87.41% 87.41% 99.96% 97.70% 96.33% 77.00% 93.43% 98.29% 96.88% 85.15% 92.37%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 99.33% 99.02% 99.93% 99.02% 98.53% 97.36% 99.33% 99.33% 99.33% 99.33% 99.615%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 22.53% 31.30% 44.44% 84.85% 99.95% 84.53% 99.36% 68.37% 80.86% 97.73% 80.87%	89.09% 88.26% 94.38% 86.05% 85.87% 89.34% 95.63% 98.13% 96.59% 100.00% 99.47% 99.67% 99.15% 99.59% 92.44% 98.04% 99.73% 99.20%	However t 1 55.92% 71.67% 74.67% 49.22% 49.22% 70.67% 72.80% 68.25% 72.17% 80.96% 98.20% 99.99% 87.20% 97.52% 87.31% 72.52% 89.33% 87.21%	1 Decemb 1 29.83% 24.20% 24.20% 25.92% 31.16% 57.83% 58.13% 64.67% 42.85% 62.22% 90.15% 99.96% 89.41% 99.23% 76.29% 70.49% 86.71% 80.96% 97.71% 67.69% 82.52%	93.79% 89.29% 94.55% 91.34% 92.11% 92.56% 96.53% 99.28% 99.02% 99.98% 99.70% 99.60% 99.46% 99.17% 99.50% 99.50% 99.50% 99.50%	He also se. 37.83% 19.20% 62.34% 19.31% 21.66% 21.98% 78.44% 91.30% 93.80% 99.99% 98.44% 99.21% 87.90% 55.38% 80.85% 83.69% 99.25% 83.69% 73.68%	75.61% 65.99% 70.29% 61.04% 89.35% 99.35% 98.19% 99.32% 94.49% 94.49% 94.84% 99.56% 93.60% 95.52%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 99.98% 92.59% 97.29% 55.77% 77.62% 74.68% 91.50% 99.70% 93.46% 80.65%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 73.35% 99.99% 74.81% 97.30% 78.01% 91.91% 83.52% 72.90% 98.56% 76.70% 94.40%	86.85% 72.34% 80.12% 82.15% 82.00% 91.89% 92.99% 95.79% 96.08% 99.99% 99.40% 99.74% 98.48% 96.50% 98.48% 98.85%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 19.8 20.0 20.6 20.8 21.7 23.5 23.6 23.9 24.4 24.5 24.5	model_small_bert_ 7 model_small_bert_ 9 model_albert_en_ 1 model_small_bert_ 1 model_small_bert_ 5 model_small_bert_ 5 model_small_bert_ 6 model_small_bert_ 7 model_small_bert_ 8 model_small_bert_ 9 model_small_bert_	2.90% 5.27% 10.00% 17.71% 6.72% 43.62% 66.57% 71.93% 99.98% 95.69% 98.99% 66.86% 87.20% 82.34% 96.79% 99.76% 87.76% 87.76%	63.71% 3.04° 55.73% 8.84° 71.47% 11.12° 46.86% 10.03° 44.22% 9.46° 61.27% 3.62° 36.91% 34.76° 92.91% 47.02° 90.26% 24.39° 99.41% 99.88° 98.70% 71.25° 99.92% 98.36° 96.17% 27.34° 94.81% 91.18° 92.53% 88.66° 98.86% 67.29° 99.86% 96.65° 82.49% 90.77° 97.70% 91.16° 99.80% 98.00°	6 4.19% 6 9.53% 6 20.18% 6 10.59% 6 4.70% 6 19.76% 6 4.07% 6 64.07% 6 99.98% 6 99.98% 6 99.38% 6 99.38% 6 70.49% 6 70.49% 6 99.70% 6 99.70% 6 99.70%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 47.15% 99.99% 91.35% 96.74% 73.55% 82.00% 69.72% 74.59% 99.50% 91.94% 80.47% 99.48%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 99.10% 99.54% 99.99 99.62% 99.93% 99.51% 99.941% 99.944% 99.91% 99.24% 99.92% 99.93%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 99.98% 98.02% 96.83% 96.03% 91.16% 84.50% 94.55% 99.78% 93.37% 93.37%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 74.07% 99.49% 11.59% 39.40% 34.51% 66.57% 16.89% 85.85% 42.67% 50.19% 76.44%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 31.38% 80.29% 99.98% 94.51% 96.29% 31.57% 21.16% 58.06% 58.06% 59.08% 99.38%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.49% 99.99% 91.98% 99.74% 72.22% 96.46% 86.26% 86.33% 99.39% 96.48% 84.69% 84.69%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 99.97% 87.29% 95.18% 95.18% 92.49% 87.58% 98.80% 97.65% 95.95%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34% 99.99% 95.20% 96.77% 67.43% 65.89% 66.24% 99.55% 75.94% 82.61% 98.75%	NATO form 16.77% 10.22% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.81% 65.86% 99.99% 86.39% 52.67% 76.28% 44.81% 86.75% 99.70% 35.23% 62.89% 95.74%	CHT-WIT Brussels is 2.91% 3.46% 3.45% 4.63% 11.34% 8.34% 31.29% 36.39% 38.64% 82.08% 99.64% 82.06% 76.07% 98.86% 75.89% 52.78% 92.97%	7.28% 99.99% 90.62% 99.86% 99.28% 99.99% 90.99% 90.99% 90.99% 90.99% 90.99% 90.99% 90.99% 90.99% 90.99% 90.99% 90.99%	38.79% 45.55% 68.52% 77.4% 41.41% 63.98% 78.03% 85.40% 91.63% 99.98% 98.50% 98.50% 91.19% 94.93% 79.40% 94.34% 99.62% 99.25% 94.25% 96.46%	26.05% 15.06% 38.61% 26.05% 15.06% 32.61% 64.97% 84.10% 96.40% 99.97% 95.87% 97.99% 88.44% 91.98% 92.83% 95.47% 92.83% 95.47% 92.83% 95.47%	58.72% 72.68% 81.92% 64.82% 64.82% 66.01% 51.09% 87.31% 61.51% 92.91% 93.23% 87.54% 96.64% 84.00% 91.52% 98.57% 96.14% 86.03% 89.45%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 83.39% 96.23% 77.00% 96.23% 77.00% 93.43% 93.43% 93.43% 95.25% 97.24%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 96.37% 99.93% 99.02% 98.63% 97.41% 99.83% 99.736% 99.33% 99.33% 99.615% 96.15% 96.95%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 22.53% 31.30% 44.44% 84.85% 99.95% 84.53% 99.36% 68.37% 80.86% 58.33% 90.06% 97.73% 67.71%	89.09% 88.28% 86.05% 85.87% 89.34% 89.63% 99.63% 90.04% 99.67% 99.55% 99.59% 99.59% 99.44% 99.20% 99.30% 99.30% 99.70%	However t 1 55.92% 71.67% 78.52% 49.22% 70.67% 72.80% 68.25% 82.90% 99.99% 97.40% 98.05% 87.20% 99.33% 89.25% 87.21% 99.33% 89.25% 87.21% 99.57%	1 Decemb   29.83%   24.20%   24.20%   31.16%   57.83%   58.13%   42.85%   62.22%   90.15%   99.23%   76.29%   70.49%   86.71%   80.96%   97.71%   67.69%   82.52%   84.08%	93.79% 89.29% 94.55% 91.34% 92.11% 92.59% 95.26% 96.53% 99.28% 99.02% 99.98% 99.96% 99.96% 99.95% 99.82% 99.82% 99.82%	He also se 37.83% 19.20% 62.34% 19.31% 21.66% 21.98% 78.44% 91.30% 93.80% 99.9.9% 87.90% 55.38% 83.69% 99.25% 83.99% 95.89%	38.07% 50.10% 64.10% 75.61% 65.99% 70.29% 61.04% 89.35% 93.07% 96.93% 99.99% 98.19% 99.32% 94.49% 92.65% 94.04% 94.84% 99.56% 93.60% 99.58%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01% 99.98% 92.59% 97.29% 55.77% 77.620 74.68% 91.50% 93.46% 80.65% 98.96%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 71.81% 99.99% 74.81% 97.30% 78.01% 91.91% 83.52% 72.99% 98.56% 76.70% 94.40% 95.49%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89% 95.79% 99.99% 99.40% 99.40% 99.45% 98.48% 98.55% 98.48% 99.75%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 19.8 20.0 20.6 20.8 21.7 23.5 23.6 23.9 24.4 24.5 24.5	model_small_bert_ // model_small_bert_ model_albert_en_ model_amall_bert_ model_small_bert_ model_small_bert_ model_small_bert_ model_small_bert_ model_small_bert_ model_small_bert_ model_small_bert_ model_small_bert_ model_small_bert_ // model_small_bert_ model_s	2.90% 5.27% 10.00% 17.71% 13.82% 6.72% 43.62% 66.57% 96.22% 99.88% 95.69% 98.99% 66.86% 87.20% 82.34% 96.79% 99.76% 87.76% 78.11%	63.71% 3.04* 55.73% 8.84* 71.47% 11.12* 46.86% 10.03* 44.22% 9.46* 61.27% 3.62* 36.91% 34.76* 99.91% 47.02* 90.26% 24.39* 99.41% 96.88* 100.00% 99.88* 98.70% 71.25* 99.92% 98.36* 96.17% 27.34* 94.81% 91.18* 92.53% 88.66* 99.86% 96.65* 82.49% 90.77* 97.70% 91.16* 99.80% 98.00*	6 4.19% 6 9.53% 6 9.53% 6 17.49% 6 10.59% 6 4.70% 6 19.76% 6 80.72% 6 99.88% 6 99.98% 6 73.16% 6 74.85% 6 97.03% 6 99.70% 6 94.61% 6 99.66% 9 99.70%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 77.12% 97.12% 99.99% 91.35% 82.00% 69.72% 74.59% 99.50% 99.50% 99.48% 80.47% 80.47%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 99.54% 99.54% 99.52% 99.51% 99.41% 99.09% 99.91% 99.24% 99.50% 99.86% 99.98%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 88.11% 99.98% 98.02% 96.83% 91.16% 84.50% 94.55% 99.78% 93.37% 91.77% 98.38% 98.75%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23% 28.07% 99.49% 11.59% 34.51% 45.04% 66.57% 16.89% 85.85% 42.67% 50.19% 76.44% 72.65%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 31.33% 80.29% 99.98% 94.51% 96.29% 21.16% 12.37% 67.55% 99.04% 58.06% 55.85% 97.38%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.44% 99.99% 91.98% 99.74% 62.66% 86.26% 86.26% 86.33% 99.39% 96.48% 84.69% 99.21%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 58.46% 99.97% 95.95% 95.18% 92.49% 87.58% 98.80% 97.65% 95.95% 95.95%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 99.9% 95.20% 96.77% 67.43% 42.54% 65.89% 66.24% 99.55% 75.94% 82.61% 98.75% 89.97%	NATO form 16.77% 10.22% 18.15% 18.15% 18.81% 32.03% 49.44% 66.62% 46.81% 65.86% 99.99% 91.99% 86.39% 52.67% 76.28% 44.81% 86.75%	CHT-WIT Brussels is 2.91% 3.46% 3.45% 4.63% 4.63% 4.134% 8.34% 31.29% 36.39% 38.64% 83.28% 99.64% 82.08% 67.01% 82.00% 75.89% 52.78% 99.87%	7.5% 91.2% 92.6% 93.68% 85.81% 84.28% 77.95% 91.70% 94.29% 95.87% 94.30% 75.28% 97.12% 99.99% 96.62% 85.69% 94.01% 98.23% 99.86% 97.45% 97.45% 99.42%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63% 99.98% 98.50% 91.19% 94.93% 79.40% 94.34% 99.62% 95.09% 94.25% 96.46% 98.41%	andas is a N 12.99% 16.68% 28.05% 38.61% 26.05% 15.06% 32.61% 64.97% 84.10% 99.97% 99.97% 97.99% 88.44% 91.98% 83.53% 95.47% 92.83% 95.44% 86.84% 99.24%	58.72% 72.68% 81.92% 64.82% 54.66% 66.01% 51.09% 87.31% 61.51% 92.91% 98.72% 93.23% 87.54% 96.64% 84.00% 91.52% 95.22% 98.57% 96.14% 86.03% 89.45%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 99.96% 97.70% 96.23% 77.00% 93.43% 93.43% 98.29% 96.88% 85.15% 99.24%	59.57% 66.15% 80.02% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 96.37% 97.41% 99.93% 99.02% 98.63% 94.76% 99.33% 99.82% 96.15% 96.95% 94.99%	17.01% 20.38% 30.25% 53.66% 19.63% 28.97% 22.53% 31.30% 84.85% 99.95% 84.53% 80.86% 58.33% 90.06% 97.73% 67.71% 80.87% 97.03%	89.09% 89.26% 89.28% 94.38% 86.05% 85.87% 89.34% 99.57% 99.15% 99.47% 99.59% 99.47% 99.49% 99.35%	55.92% 71.67% 78.52% 49.22% 70.67% 72.80% 68.25% 80.96% 98.20% 99.99% 92.40% 98.05% 87.20% 99.33% 87.31% 99.33%	1 Decemb   29.83%   24.20%   31.16%   57.83%   58.13%   64.285%   62.22%   90.15%   99.96%   89.41%   70.49%   86.71%   80.96%   97.71%   67.69%   82.52%   84.08%   94.91%	93.79% 89.29% 94.55% 91.34% 92.11% 92.59% 99.2653% 99.28% 99.90% 99.70% 99.60% 99.46% 99.17% 99.50% 99.82% 99.82% 99.82%	He also se: 37.83% 19.20% 19.20% 62.34% 19.31% 21.66% 21.98% 91.30% 99.99% 98.44% 99.21% 87.90% 55.38% 80.85% 99.25% 83.99% 73.68% 99.25%	75.61% 64.10% 75.61% 65.99% 70.29% 61.04% 93.07% 96.93% 99.99% 94.49% 92.65% 94.49% 99.56% 93.60% 99.56% 99.48%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01% 99.98% 92.59% 97.29% 55.77% 77.62% 74.68% 99.970% 93.46% 80.65% 98.96% 98.96% 96.57%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 73.35% 99.99% 74.81% 73.35% 99.99% 74.81% 97.30% 83.52% 72.90% 98.56% 76.70% 94.40% 95.49% 89.95%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89% 92.99% 96.08% 99.97% 98.48% 99.57% 98.48% 99.84% 99.84% 98.55% 99.75%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 19.8 20.0 20.6 20.8 21.7 23.5 23.6 23.9 24.4 24.5 24.7 25.4	model_small_bert_ model_small_bert_ model_albert_en_ model_albert_en_ model_amall_bert_ model_small_bert_ model_small_be	2.90% 5.27% 10.00% 17.71% 13.82% 66.72% 43.62% 66.57% 71.93% 96.22% 99.98% 95.69% 66.86% 87.20% 82.34% 99.76% 87.76% 78.11%	63.71% 3.04° 55.73% 8.84° 71.47% 11.12° 46.86% 10.03° 44.22% 9.46° 61.27% 3.62° 36.91% 34.76° 92.91% 47.02° 99.16% 24.39° 99.41% 96.88° 100.00% 99.88° 98.70% 71.25° 99.92% 98.36° 96.17% 27.34° 94.81% 91.18° 92.53% 88.66° 82.49% 90.77° 97.70% 91.16° 99.80% 98.00° 99.87% 99.39° 99.00% 97.89°	6 4.19% 6 9.53% 6 20.18% 6 17.49% 6 10.59% 6 4.70% 6 19.76% 6 80.72% 6 98.66% 6 99.98% 6 73.16% 6 74.85% 6 70.49% 6 97.03% 6 99.463% 6 99.38% 6 99.38% 6 73.16% 6 99.38% 6 99.38%	31.66% 47.72% 49.22% 19.78% 79.12% 55.04% 78.86% 47.15% 97.12% 99.9% 91.35% 96.74% 73.55% 82.00% 69.72% 74.59% 99.50%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 99.54% 99.99% 99.62% 99.51% 99.41% 99.93% 99.51% 99.93% 99.93% 99.94% 99.95% 99.96% 99.99%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 88.11% 99.98% 98.02% 96.03% 91.16% 84.50% 94.55% 99.78% 93.37% 91.77% 98.75%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23% 28.07% 99.49% 11.59% 34.51% 45.04% 66.57% 16.89% 42.67% 50.19% 76.43% 76.45% 47.31%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 80.29% 99.98% 94.51% 96.29% 21.16% 12.37% 67.55% 67.55% 99.04% 58.06% 55.85% 97.38% 76.12%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.44% 99.99% 91.98% 99.21% 96.46% 86.26% 86.26% 86.33% 99.39% 96.48% 84.69% 99.21% 99.716%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 58.46% 99.97% 87.29% 95.95% 95.18% 92.49% 87.58% 95.95% 95.12% 90.00%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34% 80.41% 99.9% 95.20% 67.43% 42.54% 65.89% 66.24% 69.55% 75.94% 82.61% 98.75% 99.583%	NATO form 16.77% 10.22% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.81% 65.86% 99.99% 91.99% 52.67% 76.28% 44.81% 86.75% 99.70% 35.23% 62.89% 99.70% 35.23% 84.05%	CHT-WIT Brussels is 2.91% 3.46% 3.45% 4.63% 41.34% 8.34% 31.29% 36.39% 38.64% 83.28% 99.64% 82.68% 67.01% 82.00% 75.89% 52.78% 92.97% 98.86% 75.89% 92.97%	7.5% 99.9% 95.62% 99.86% 99.42% 99.86% 99.86% 99.986% 99.986% 99.99%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63% 99.98% 98.50% 98.50% 94.93% 79.40% 94.93% 79.40% 94.34% 99.62% 99.62% 99.62% 98.41% 97.82%	andas is a N 12.99% 16.68% 28.05% 15.06% 32.61% 64.97% 84.10% 96.40% 99.97% 97.99% 88.44% 91.98% 83.53% 95.47% 92.83% 95.44% 86.84% 98.81%	58.72% 72.68% 81.92% 64.82% 64.82% 66.01% 51.09% 87.31% 61.51% 92.91% 93.23% 87.54% 96.64% 84.00% 91.52% 96.52% 96.14% 86.03% 89.45% 96.65%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 99.96% 97.70% 93.43% 99.23% 85.15% 92.37% 99.24% 99.24%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 96.37% 97.41% 99.93% 99.02% 98.63% 94.76% 99.33% 94.76% 99.32% 96.15% 96.95% 94.99%	17.01% 20.38% 30.25% 53.66% 19.63% 22.53% 31.30% 84.85% 99.95% 84.53% 99.36% 80.86% 58.33% 90.06% 97.73% 67.71% 80.87% 97.03% 97.03%	89.09% 88.26% 88.26% 85.87% 89.34% 89.63% 99.13% 99.75% 99.45% 99.20% 98.44% 99.73% 99.73% 99.73% 99.75%	55.92% 71.67% 72.52% 49.22% 70.67% 72.80% 68.25% 72.17% 80.96% 98.20% 99.99% 99.40% 87.21% 95.83% 87.21% 91.57% 87.21% 99.23% 99.23%	1 Decemb   29.83%   24.20%   25.92%   31.16%   57.83%   58.13%   64.67%   42.85%   62.22%   90.15%   99.96%   89.41%   99.23%   76.29%   70.49%   86.71%   80.96%   97.71%   67.69%   82.52%   84.08%   94.91%   81.81%	93.79% 89.29% 94.55% 91.34% 92.11% 92.59% 92.65% 99.28% 99.02% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00%	He also set 37.83% 19.20% 62.34% 19.31% 21.66% 21.98% 91.30% 93.80% 99.21% 87.90% 55.38% 80.85% 83.69% 99.25% 83.99% 73.68% 95.89% 91.56% 91.56%	The comps 38.07% 50.10% 64.10% 64.10% 65.99% 70.29% 61.04% 89.35% 93.07% 99.99% 99.25% 94.49% 99.56% 99.56% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.56% 99.48% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01% 99.98% 92.59% 97.29% 77.62% 77.62% 74.68% 99.70% 99.70% 99.70% 99.80% 99.55% 99.65% 98.96% 96.57% 93.35%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 73.35% 99.99% 74.81% 97.30% 78.01% 91.91% 83.52% 72.90% 94.40% 95.49% 89.95% 85.28%	86.85% 72.34% 80.12% 82.15% 78.15% 82.00% 91.89% 92.99% 96.08% 99.99% 99.40% 99.40% 99.57% 98.40% 99.84% 99.55% 98.48% 99.75% 99.75%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 19.8 20.0 20.6 20.8 21.7 23.5 23.6 23.9 24.4 24.5 24.5 24.7 25.4	model_small_bert_ 7 model_small_bert_ 1 model_small_bert_ 1 model_small_bert_ 2 model_small_bert_ 3 model_small_bert_ 5 model_small_bert_ 6 model_small_bert_ 7 model_small_bert_ 8 model_small_bert_ 9 model_small_bert_	2.90% 5.27% 10.00% 17.71% 13.82% 6.72% 43.62% 66.57% 71.93% 96.22% 99.98% 95.69% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20% 87.20%	63.71% 3.04% 55.73% 8.84% 71.47% 11.12% 46.86% 10.03% 44.22% 9.466 61.27% 3.62% 36.91% 34.76% 92.91% 47.02% 99.12% 24.39% 99.41% 96.88% 100.00% 99.88% 98.70% 71.25% 99.92% 98.366% 99.12% 99.32% 99.86% 67.29% 99.86% 96.65% 82.49% 90.77% 97.70% 91.16% 99.80% 98.09% 99.67% 99.39% 99.90% 97.89% 99.90% 97.89%	6 4.19% 6 9.53% 6 20.18% 6 17.49% 6 10.59% 6 4.70% 6 19.76% 6 80.72% 6 98.66% 6 99.98% 6 94.63% 6 74.85% 6 70.49% 6 70.49% 6 99.70% 6 99.46% 6 99.46% 6 99.46% 6 99.46% 6 99.46% 6 99.46% 6 99.46% 6 99.46% 6 99.46%	31.66% 47.72% 49.22% 19.78% 58.34% 79.12% 55.04% 78.86% 47.15% 97.12% 99.99% 91.35% 96.74% 73.55% 82.00% 69.72% 74.59% 99.50% 91.94% 80.47% 99.48% 80.47% 99.48% 80.37% 99.05% 97.92%	95.08% 98.19% 91.73% 96.67% 97.38% 96.96% 98.58% 99.10% 99.54% 99.99% 99.62% 99.93% 99.41% 99.00% 99.44% 99.24% 99.50% 99.86% 99.86%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 88.11% 99.98% 98.02% 96.03% 91.16% 84.50% 99.78% 99.78%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23% 28.07% 99.49% 11.59% 39.40% 66.57% 16.89% 85.85% 42.67% 50.19% 76.44% 72.64% 47.31% 49.31%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 31.33% 80.29% 99.98% 94.51% 96.29% 21.16% 12.37% 67.55% 99.04% 58.06% 55.85% 97.38% 75.85% 96.74%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.44% 99.99% 91.98% 99.72% 96.46% 86.33% 99.39% 96.48% 84.69% 99.21% 98.74% 99.33%	54.09% 67.87% 80.31% 76.60% 86.55% 94.63% 80.33% 82.79% 58.46% 99.97% 87.29% 99.51.8% 92.49% 87.58% 98.80% 97.65% 95.512% 90.37% 90.00%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34% 80.41% 99.99% 95.20% 96.77% 67.43% 42.54% 65.89% 66.24% 99.55% 75.94% 82.61% 98.75% 89.97% 95.83% 97.77%	NATO form 16.77% 10.22% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.63% 65.86% 99.99% 91.99% 86.39% 44.81% 86.75% 99.70% 35.23% 62.89% 95.74% 86.75% 86.75% 76.28% 44.05% 77.4% 86.75% 78.55%	CHT-WIT Brussels is 2,91% 3.46% 4.63% 4.63% 4.134% 8.34% 36.39% 38.64% 83.28% 99.64% 82.68% 95.15% 14.48% 67.01% 82.00% 76.07% 98.86% 75.89% 52.78% 92.97% 93.31% 96.81%	75.28% 99.99% 96.62% 85.69% 91.70% 94.29% 95.87% 97.12% 99.99% 96.62% 85.69% 94.01% 98.23% 99.86% 97.45% 99.42% 99.98% 99.42% 99.42%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63% 99.98% 98.50% 98.56% 94.93% 79.40% 94.93% 79.40% 94.93% 95.09% 96.46% 98.41% 97.82% 97.82% 98.89%	28.05% 12.99% 16.68% 28.05% 38.61% 26.05% 15.06% 44.97% 84.10% 96.40% 99.97% 95.87% 97.99% 88.44% 97.99% 88.44% 92.83% 95.47% 92.83% 95.44% 98.81% 99.24% 99.24% 99.575% 98.26%	58.72% 72.68% 81.92% 64.82% 54.66% 66.01% 51.09% 87.31% 92.91% 98.72% 93.23% 87.54% 84.00% 91.52% 95.22% 96.64% 86.03% 89.45% 96.65% 96.65%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 87.41% 99.96% 97.70% 96.23% 93.43% 98.29% 95.237% 97.24% 99.237% 97.24% 99.24%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 99.33% 99.02% 98.53% 97.36% 94.76% 99.33% 99.82% 96.15% 96.95% 94.99% 99.81%	17.01% 20.38% 30.25% 53.66% 19.63% 22.53% 31.30% 44.44% 84.85% 99.95% 84.53% 99.36% 58.33% 90.06% 97.73% 67.71% 80.87% 97.67% 97.67%	89.09% 88.26% 89.438% 86.05% 85.87% 89.48% 99.63% 99.63% 99.47% 99.47% 99.559% 92.44% 99.73% 99.73% 99.70% 99.73% 99.73% 99.73%	However 1   55.92%   71.67%   78.52%   49.22%   70.67%   72.80%   68.25%   72.17%   80.96%   98.20%   99.99%   87.20%   97.33%   87.21%   99.33%   87.21%   99.33%   87.21%   99.23%   99.23%   99.23%   99.23%   99.23%   99.23%   99.23%   99.23%   99.23%   99.23%   99.23%   99.23%   99.23%   99.23%   99.23%   99.99%	1 Decemb 1 29.83% 24.20% 25.92% 31.16% 57.83% 58.13% 64.67% 42.85% 62.22% 90.15% 99.96% 89.41% 99.23% 76.29% 70.49% 86.71% 80.96% 97.71% 80.96% 94.85.52% 84.08% 94.181% 84.16%	93.79% 89.29% 94.55% 91.34% 92.11% 92.26% 96.53% 99.28% 99.02% 99.98% 99.02% 99.17% 99.02% 99.17% 99.02% 99.17% 99.02% 99.17% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02% 99.02%	He also se, 37,83% 19,20% 62,34% 19,31% 21,66% 91,30% 99,99% 84,4% 99,21% 87,90% 55,38% 80,85% 83,69% 99,25% 83,69% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55% 99,55	The comp: 38.07% 50.10% 64.10% 75.61% 65.99% 70.29% 61.04% 89.35% 93.07% 96.93% 99.99% 94.49% 92.65% 94.04% 94.84% 93.60% 95.52% 99.48% 97.33% 99.29% 99.62%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01% 99.98% 92.59% 97.29% 77.62% 74.68% 91.50% 99.70% 93.46% 80.65% 98.96% 96.57% 93.35% 97.31%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 73.35% 99.99% 74.81% 97.30% 99.99% 78.01% 91.91% 83.52% 72.90% 98.56% 76.70% 94.40% 95.49% 89.95% 85.28% 76.46%	86.85% 72.34% 80.12% 82.15% 82.00% 91.89% 92.99% 95.79% 96.08% 99.99% 99.40% 99.74% 96.50% 98.48% 98.49% 98.48% 99.75%
9.6 9.7 11.9 12.1 13.1 14.6 15.5 17.2 19.8 20.0 20.6 20.8 21.7 23.5 23.6 23.9 24.4 24.5 24.5 24.7 25.4 25.5 26.3 26.3	model_small_bert_ model_small_bert_ model_albert_en_ model_albert_en_ model_amall_bert_ model_small_bert_ model_small_be	2.90% 5.27% 10.00% 17.71% 13.82% 66.72% 43.62% 66.57% 71.93% 96.22% 99.98% 95.69% 66.86% 87.20% 82.34% 99.76% 87.76% 78.11%	63.71% 3.04° 55.73% 8.84° 71.47% 11.12° 46.86% 10.03° 44.22% 9.46° 61.27% 3.62° 36.91% 34.76° 92.91% 47.02° 99.16% 24.39° 99.41% 96.88° 100.00% 99.88° 98.70% 71.25° 99.92% 98.36° 96.17% 27.34° 94.81% 91.18° 92.53% 88.66° 82.49% 90.77° 97.70% 91.16° 99.80% 98.00° 99.87% 99.39° 99.00% 97.89°	6 4.19% 6 9.53% 6 20.18% 6 10.59% 6 10.59% 6 4.70% 6 19.76% 6 40.77% 6 80.72% 6 98.66% 6 99.98% 6 94.63% 6 73.16% 6 74.85% 6 70.49% 6 97.03% 6 99.70% 6 99.70% 6 99.46% 6 99.46% 6 99.46% 6 99.46% 6 99.38%	31.66% 47.72% 49.22% 19.78% 79.12% 55.04% 78.86% 47.15% 97.12% 99.9% 91.35% 96.74% 73.55% 82.00% 69.72% 74.59% 99.50%	95.08% 98.19% 99.29% 91.73% 96.67% 97.38% 96.96% 99.54% 99.99% 99.62% 99.51% 99.41% 99.93% 99.51% 99.93% 99.93% 99.94% 99.95% 99.98% 99.99%	40.74% 21.12% 38.87% 64.57% 18.99% 31.25% 40.36% 80.85% 76.14% 88.11% 99.98% 98.02% 96.03% 91.16% 84.50% 94.55% 99.78% 93.37% 91.77% 98.75%	33.40% 22.93% 18.02% 15.65% 64.01% 68.11% 74.01% 4.28% 7.23% 28.07% 99.49% 11.59% 34.51% 45.04% 66.57% 16.89% 42.67% 50.19% 76.43% 76.45% 47.31%	8.43% 4.97% 7.88% 5.77% 6.15% 5.40% 15.82% 32.37% 80.29% 99.98% 94.51% 96.29% 21.16% 12.37% 67.55% 67.55% 99.04% 58.06% 55.85% 97.38% 76.12%	27.76% 17.12% 31.52% 32.63% 29.47% 50.01% 60.85% 47.47% 73.25% 99.44% 99.99% 91.98% 99.21% 96.46% 86.26% 86.26% 86.33% 99.39% 96.48% 84.69% 99.21% 99.716%	54.09% 67.87% 80.31% 76.60% 73.91% 86.55% 94.63% 80.33% 82.79% 58.46% 99.97% 87.29% 95.95% 95.18% 92.49% 87.58% 95.95% 95.12% 90.00%	25.37% 22.71% 30.28% 17.84% 48.20% 66.77% 60.27% 86.01% 56.34% 80.41% 99.9% 95.20% 67.43% 42.54% 65.89% 66.24% 69.55% 75.94% 82.61% 98.75% 99.583%	NATO form 16.77% 10.22% 18.15% 21.42% 18.81% 32.03% 49.44% 66.62% 46.81% 65.86% 99.99% 91.99% 52.67% 76.28% 44.81% 86.75% 99.70% 35.23% 62.89% 99.70% 35.23% 84.05%	CHT-WIT Brussels is 2.91% 3.46% 3.45% 4.63% 41.34% 8.34% 31.29% 36.39% 38.64% 83.28% 99.64% 82.68% 67.01% 82.00% 75.89% 52.78% 92.97% 98.86% 75.89% 92.97%	7.5% 99.9% 95.62% 99.86% 99.42% 99.86% 99.86% 99.986% 99.986% 99.99%	38.79% 45.55% 68.52% 75.74% 41.41% 63.98% 78.03% 85.47% 85.20% 91.63% 99.98% 98.50% 98.50% 94.93% 79.40% 94.93% 79.40% 94.34% 99.62% 99.62% 99.62% 98.41% 97.82%	andas is a N 12.99% 16.68% 28.05% 15.06% 32.61% 64.97% 84.10% 96.40% 99.97% 97.99% 88.44% 91.98% 83.53% 95.47% 92.83% 95.44% 86.84% 98.81%	58.72% 72.68% 81.92% 64.82% 64.82% 66.01% 51.09% 87.31% 61.51% 92.91% 93.23% 87.54% 96.64% 84.00% 91.52% 96.52% 96.14% 86.03% 89.45% 96.65%	12.26% 34.28% 44.87% 21.94% 53.46% 34.14% 50.22% 87.41% 99.96% 97.70% 93.43% 99.23% 85.15% 92.37% 99.24% 99.24%	59.57% 66.15% 80.02% 80.35% 70.02% 83.41% 64.26% 87.66% 96.37% 97.41% 99.93% 99.02% 98.63% 94.76% 99.33% 94.76% 99.32% 96.15% 96.95% 94.99%	17.01% 20.38% 30.25% 53.66% 19.63% 22.53% 31.30% 84.85% 99.95% 84.53% 99.36% 80.86% 58.33% 90.06% 97.73% 67.71% 80.87% 97.03% 97.03%	89.09% 88.26% 88.26% 85.87% 89.34% 89.63% 99.13% 99.75% 99.45% 99.20% 98.44% 99.73% 99.73% 99.73% 99.75%	55.92% 71.67% 72.52% 49.22% 70.67% 72.80% 68.25% 72.17% 80.96% 98.20% 99.99% 99.40% 87.21% 95.83% 87.21% 91.57% 87.21% 99.23% 99.23%	1 Decemb   29.83%   24.20%   25.92%   31.16%   57.83%   58.13%   64.67%   42.85%   62.22%   90.15%   99.96%   89.41%   99.23%   76.29%   70.49%   86.71%   80.96%   97.71%   67.69%   82.52%   84.08%   94.91%   81.81%	93.79% 89.29% 94.55% 91.34% 92.11% 92.59% 92.65% 99.28% 99.02% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 99.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00% 90.00%	He also set 37.83% 19.20% 62.34% 19.31% 21.66% 21.98% 91.30% 93.80% 99.21% 87.90% 55.38% 80.85% 83.69% 99.25% 83.99% 73.68% 95.89% 91.56% 91.56%	The comps 38.07% 50.10% 64.10% 64.10% 65.99% 70.29% 61.04% 89.35% 93.07% 99.99% 99.25% 94.49% 99.56% 99.56% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.48% 99.56% 99.56% 99.48% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56% 99.56%	32.50% 34.21% 31.63% 48.91% 71.07% 73.63% 74.72% 61.27% 41.32% 76.01% 99.98% 92.59% 97.29% 77.62% 77.62% 74.68% 99.70% 99.70% 99.70% 99.80% 99.55% 99.65% 98.96% 96.57% 93.35%	58.09% 19.73% 21.35% 42.65% 67.77% 62.00% 86.80% 47.81% 73.35% 99.99% 74.81% 97.30% 78.01% 91.91% 83.52% 72.90% 94.40% 95.49% 89.95% 85.28%	86.85% 72.34% 80.12% 82.15% 82.00% 91.89% 92.99% 96.08% 99.99% 99.40% 99.40% 99.57% 98.48% 99.58% 98.48% 99.74% 99.84% 99.75%



#### Das Modell mit der höchsten Güte







#### Erkenntnisse in den Testdaten über alle Modelle hinweg

- ▶ BERT-konfigurationspezifische Eigenheiten: Englische Sprache wird am besten erkannt; Groß-/Kleinschreibung wird nicht beachtet; Bedeutung mehrdeutiger Wörter wird richtig erkannt
- Einige Modelle scheinen **nicht-englische Eigennamen** (Orte, Flüsse, Personen) nicht richtig einordnen zu können Beispiele: Flüsse Fulda und Werra, Olaf Scholz → Zusammenhang mit englischer Sprache?
- Schwarzer Humor (Verbrechen, Krankheit, Tod) wird teilweise nicht erkannt; anderseits werden aber auch teilweise unangemessene Inhalte als Humor klassifiziert → Zusammenhang mit Trainingsdatensatz oder BERT-Entwicklungsethik?
- Themen wie Politik, Religion und Ethik werden von guten Modellen scheinbar neutral betrachtet → Zusammenhang mit Trainingsdatensatz oder mit BERT-Entwicklungsethik?
- ► Einige der umfangreicheren Modell-Konfigurationen neigen zu starkem Overfitting → Datensatz zu "klein"?

#### Vermutung: Antrainierte Al-Neutralität bei spezifischen Themen

GÜTE	MODELL	Atheism is a non-prophet organization.
9.6	model_small_bert_be	24.28%
9.7	model_small_bert_be	24.61%
11.9	model_albert_en_bas	26.47%
12.1	model_small_bert_be	31.64%
13.1	model_small_bert_be	46.50%
14.6	model_small_bert_be	55.80%
15.5	model_small_bert_be	14.80%
17.2	model_small_bert_be	33.09%
17.2	model_small_bert_be	9.68%
19.8	model_small_bert_be	89.51%
20.0	model_small_bert_be	99.98%
20.6	model_small_bert_be	81.32%
20.8	model_small_bert_be	92.74%
21.7	model_small_bert_be	52.21%
23.5	model_small_bert_be	62.23%
23.6	model_small_bert_be	83.40%
23.9	model_small_bert_be	59.40%
24.4	model_small_bert_be	99.67%
24.5	model_small_bert_be	79.45%
24.5	model_small_bert_be	69.35%
24.7	model_small_bert_be	99.08%
25.4	model_small_bert_be	93.77%
25.5	model_small_bert_be	85.92%
26.3	model_small_bert_be	96.13%
26.3	model_small_bert_be	87.89%
27.6	model_small_bert_be	94.55%

Atheism is a non-prophet organization.

Eigentlich zuverlässige Modelle verhalten sich neutral und klassifizieren den religiösen Witz als Nicht-Witz

Lediglich die Overfitting-Modelle klassifizieren den religiösen Witz als Witz

Herman Hollerith Zentrum



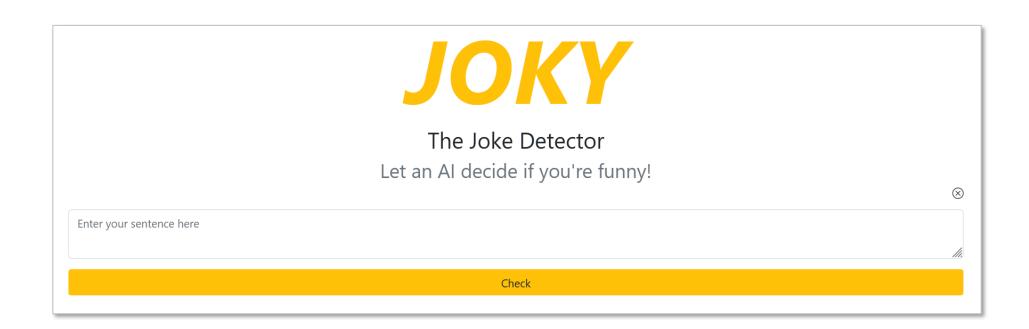
#### **Inhaltliche Aspekte**

- NLP ist verdammt komplex! Humorerkennung ist noch komplexer!
- Unsichere Interpretation der Genauigkeit, da BERT-Embeddings für uns eine Blackbox sind und es sich um ein sehr subjektives Thema handelt
- Durch die Nutzung von BERT ist ein genereller englischer Sprach- und Kultur-Bias zu erwarten
- Durch die gelabelten Trainingsdaten (isJoke = TRUE / FALSE) wurde bereits ein **spezifisches**, **subjektives Humorempfinden** (= Bias) in das Modelltraining eingebracht
- Auch eine menschliche Testgruppe (bspw. mittels Amazon Mechanical Turk) hätte keine 100% Genauigkeit beim Thema Humor

**01**Technische Realisierung

**02**Evaluation der Ergebnisse

03
Prototypische WebApp



### **IBM**Cloud Code Engine



#### **Funktionsweise**

- 1. User tippen englischen Satz ein
- 2. Modell berechnet, mit welcher Wahrscheinlichkeit es sich bei der Eingabe um einen Witz bzw. nicht um einen Witz handelt
- Direkte Ausgabe der Wahrscheinlichkeit und entsprechende schlagfertige
   Rückmeldung an die User



#### The Joke Detector

Let an AI decide if you're funny!



"I don't get this joke...Maybe it's because it isn't one?"

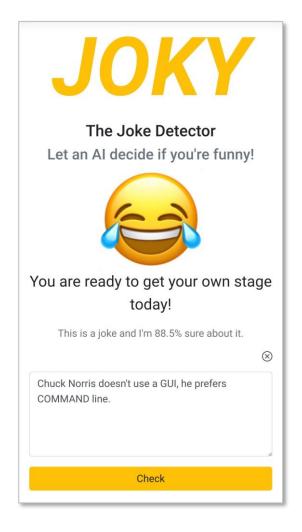
This is not a joke and I'm 52.5% sure about it.

It was the second major conflict in the Opium Wars, which were fought over the right to import opium to China, and resulted in a second defeat for the Qing dynasty and the forced legalisation of the opium trade.

Check



 $\otimes$ 





#### The Joke Detector

Let an Al decide if you're funny!



Damn, that's funny as hell! Have you ever tried a comedy career?

This is a joke and I'm 98.5% sure about it.

Yesterday I saw a guy spill all his Scrabble letters on the road. I asked him, "What's the word on the street?"

Check



#### **Technische Aspekte**

- Einbindung von NLP-Modellen bedarf großer Rechenleistung
- Der INF-Server hatte für größere BERT-Modelle zu wenig Leistung
- Auf der IBM Cloud mit GPUs (Danke an Lukes Manager bei IBM) konnte unser automatisiertes Skript leider nicht adhoc initialisiert werden
- Ein remote Jupyter Notebook ist nicht ideal für den Use Case
  "Automatisiertes Training von ML-Modellen im Hintergrund"

  Zellen-Output geht verloren, siehe Restoring computation output after disconnect in Jupyter notebook
- Wenig praxisnahe Dokumentation zur Optimierung von BERT in Zusammenspiel mit Tensor Flow



bit.ly/3JAVTrm

⚠ Aktuell ist kein Filter für unangemessene Inhalte implementiert ⚠

## Ausprobieren und Q&A.

Vielen Dank!



#### The Joke Detector

Let an AI decide if you're funny!



Did you copy that from Wikipedia or the news?

This is not a joke and I'm 76.5% sure about it.

Berlin is the capital and largest city of Germany by both area and population.

Check

#### **Quellenverzeichnis und Dokumentation**

- > Cattell, R. B. und Luborsky, L. B. 1947: Personality factors in response to humor, The Journal of Abnormal and Social Psychology 42(4)
- > ColBERT 2022: ColBERT Dataset, unter: github.com/Moradnejad/ColBERT-Using-BERT-Sentence-Embedding-for-Humor-Detection
- > Devlin, J., Chang, M.W., Lee, K. und Toutanova, K. 2019: BERT: Pre-training of Deep Bidirectional Transformers for Language Understanding
- > Google (Herausgeber): Bidirectional Encoder Representations from Transformers (BERT), unter: tfhub.dev/google/collections/bert/1
- > Hu, Y. keine Jahresangabe: Visualizing BERT Vocab/Token Embeddings, unter: yifanhu.net/BERT/
- > Turc, I., Chang, M.W., Lee, K., Toutanova, K. 2019: Well-Read Students Learn Better: On the Importance of Pre-training Compact Models
- > Wang, X und Zhang, Z. 2019: Must-Read Papers on Pre-trained Language Models, unter: github.com/thunlp/PLMpapers





bit.ly/3JAVTrm

github.com/skywalkeretw/DBE-Humor-Prototype

Herman Hollerith Zentrum –