

SemEval-2023 Task 4

ValueEval: Identification of Human Values Behind Arguments



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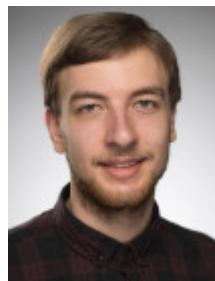
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Task 4. ValueEval: Identification of Human Values Behind Arguments

Background

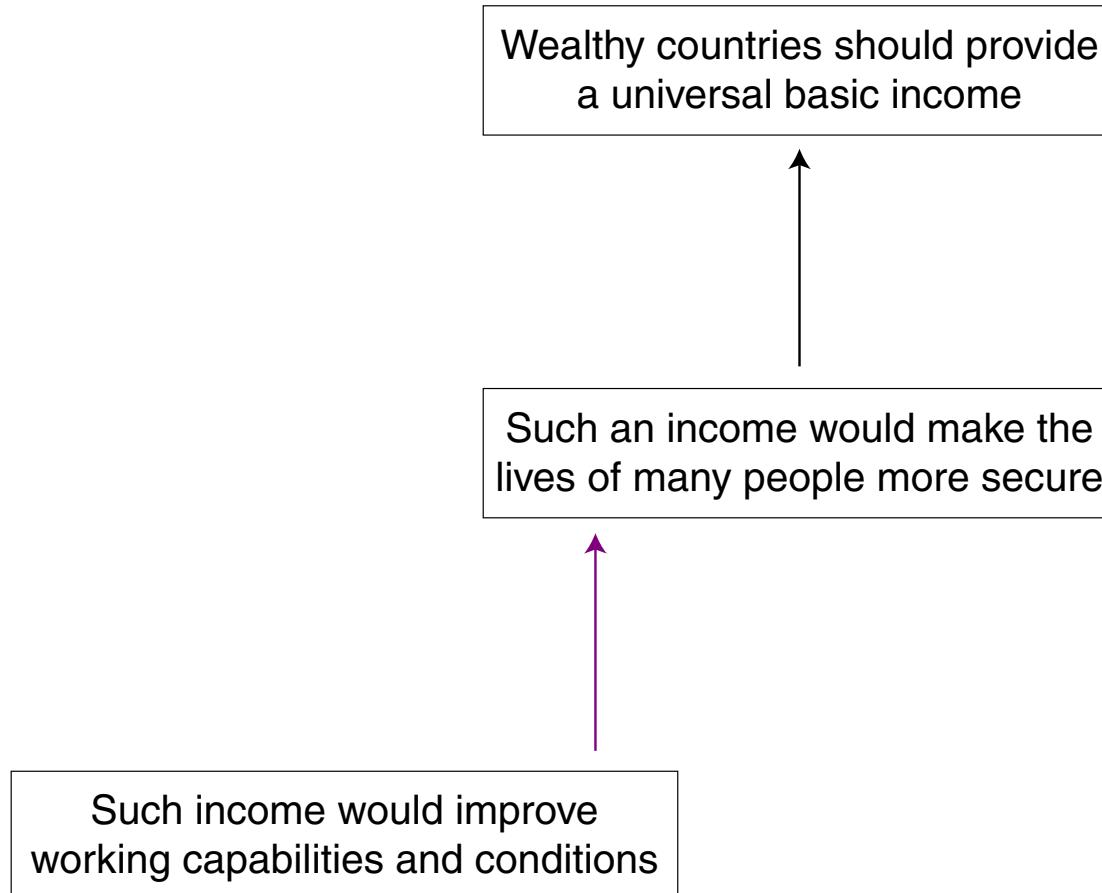
Wealthy countries should provide a universal basic income



Such an income would make the lives of many people more secure

Task 4. ValueEval: Identification of Human Values Behind Arguments

Background



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Background

“Epistemological Why”

- Why is this true?

Wealthy countries should provide
a universal basic income



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epistemological
support

Such income would improve
working capabilities and conditions

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Background

“Epistemological Why”

- Why is this true?

Wealthy countries should provide
a universal basic income

“Ethical Why”

- Why is this good?



Such an income would make the
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epistemological
support

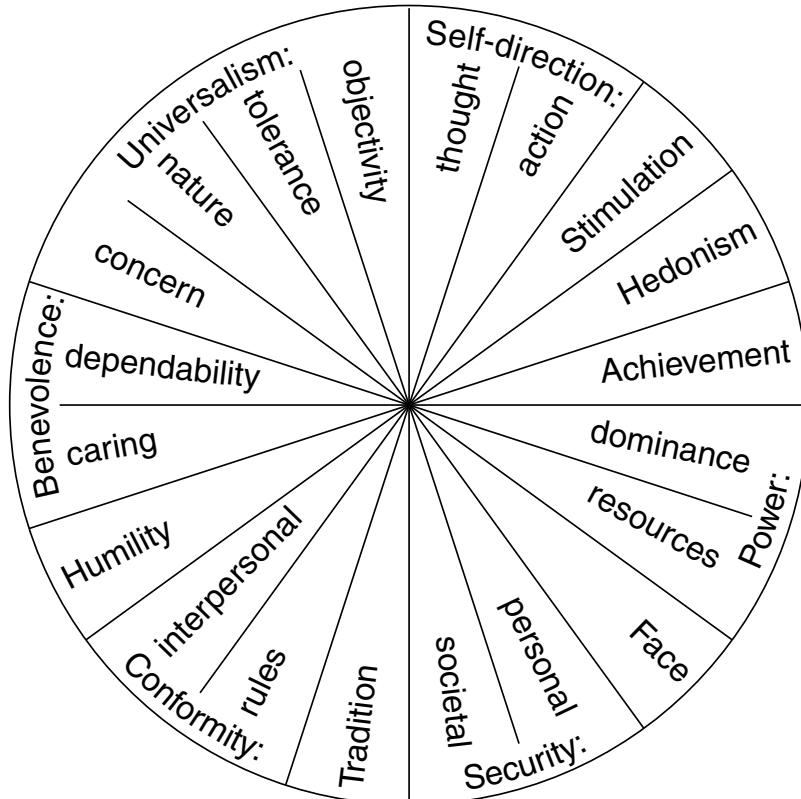
Such income would improve
working capabilities and conditions

ethical
support

It is good when people have
personal security

Task 4. ValueEval: Identification of Human Values Behind Arguments

Task Description



Task: Given a textual argument and a human value, classify whether the argument resorts to that value or not.

- Set of 20 values (categories)
- Derived from social science research, especially Schwartz' Taxonomy
- Multi-label classification

Task 4. ValueEval: Identification of Human Values Behind Arguments

The Touchè23-ValueEval Dataset

Argument source	Year	Arguments			Σ
		Train	Validation	Test	
<i>Main dataset</i>					
IBM-ArgQ-Rank-30kArgs (crowdsourced free-text)	2019–20	4576	1526	1266	7368
Conf. on the Future of Europe (democracy platform)	2021–22	591	280	227	1098
Group Discussion Ideas (debate points collection)	2021–22	226	90	83	399
\sum (main)		5393	1896	1576	8865
<i>Supplementary dataset</i>					
Zhihu (QA forum posts)	2021	-	100	-	100
Nahj al-Balagha (religious text)	900–1000	-	-	279	279
The New York Times (newspaper editorials)	2020–21	-	-	80	80
\sum (supplementary)		-	100	359	459
\sum (complete)		5393	1996	1935	9324

Arguments annotated for values by 3 crowdworkers each ($\alpha = 0.49$)

Task 4. ValueEval: Identification of Human Values Behind Arguments Submissions

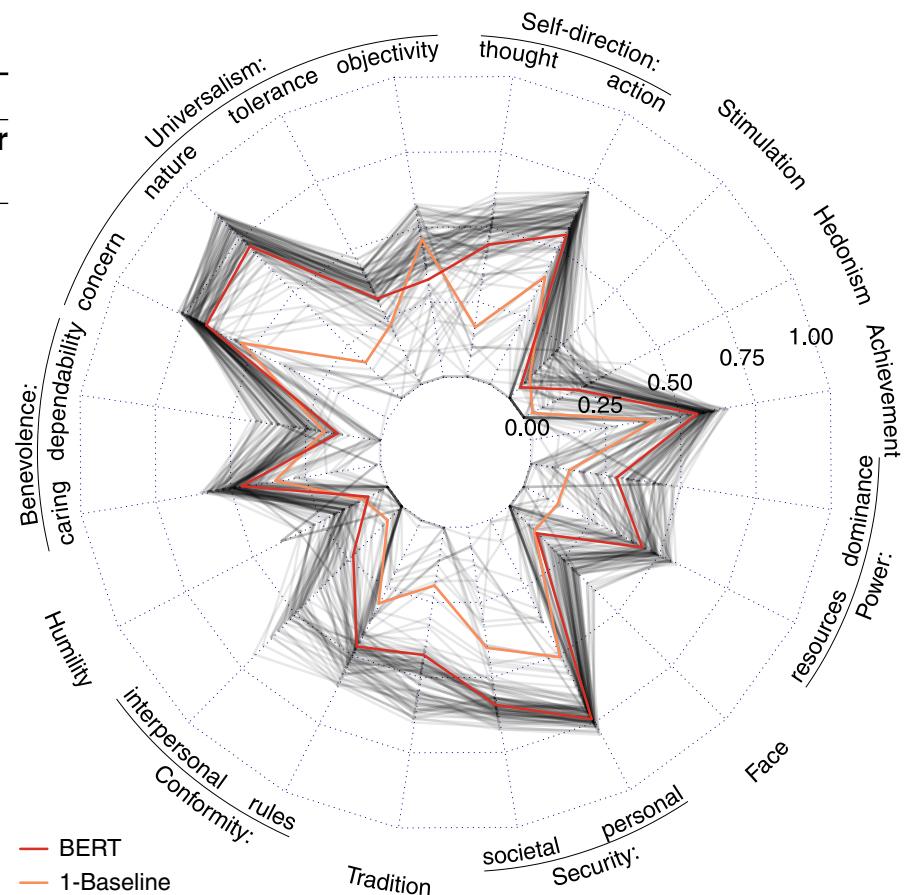
39 teams submitted runs (sent description: 37, published paper: 29, code: 23, Docker: 8)

- Mostly Transformer-based approaches (35 teams)
- Few natural language inference approaches (QA, entailment; 4 teams)
- Few uses of external data (value descriptions; 5 teams)
- Few perform pre-training (Full IBM data, ValueNet; 4 teams)
- Few perform contrastive learning (2 teams)

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Results

# Approach	Best F ₁ -score		
	Main	Religious text	Newspaper editorials
Best per value	0.59	0.48	0.47
1 Pretrained transformer ensemble Team Adam Smith	0.56	0.40	0.27
2 Fine-tuned transformer (DeBERTa) Team John Arthur	0.55	-	-
3 Transformer ensemble (weighted) Team PAI (Theodor Zwinger)	0.54	-	-
...			
7 Question-answering (BART+T5) Team Hitachi (R. M. Hare)	0.51	0.34	0.34
...			
30 BERT Baseline	0.42	0.28	0.24
...			
38 1-Baseline	0.26	0.13	0.15
...			



Task 4. ValueEval: Identification of Human Values Behind Arguments

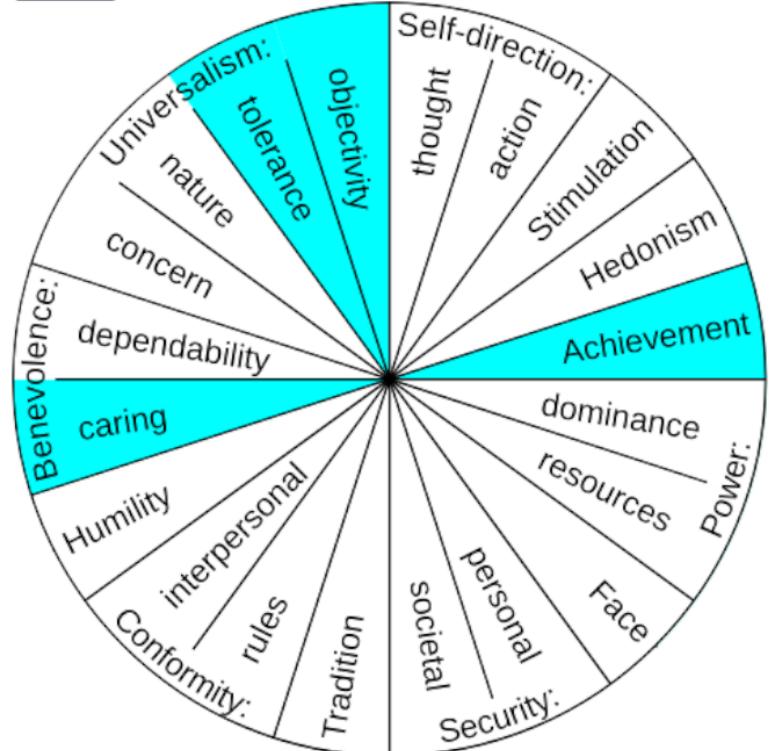
Result Dissemination

Web page: <https://valueeval.webis.de>

- ❑ Dataset of 9324 arguments from 6 sources
- ❑ 29 participant papers
- ❑ 23 code repositories
- ❑ 8 Dockerized submissions
- ❑ Online demo of best approach:
<https://values.args.me>

We need to detect human values for the greater good

Submit





ValueEval'24

Multi-lingual Human Value Detection in Texts

Organized by Webis and the European Commission's Joint Research Centre.
More information coming soon: subscribe to our [mailing list](#).

ValueEval'24

ValueEval continues for 2024!

<https://valueeval.webis.de>

Stay tuned: subscribe to our mailing list