

6.864 Task B

Brief Task Description

Annotators will be provided a number of articles scraped from different news sites about climate change, and will be asked to determine if misinformation is present in the given articles. To assess the articles' credibility, annotators will be asked to closely examine the article's content, both in the prose contained in the article and in details about the website's design, and also perform background research. After reading the articles, annotators will be asked to research the source and author of the news article. Finally, using the above factors, annotators will rate how likely the articles are to contain misinformation using the scale above.

Annotation Guidelines

In order to assign a misinformation rating to an article, the annotator should consider three parts of the article: the author, the news source, and the headline. It is expected that the annotators will use the Internet and perform simple Google searches to look up additional information for each part. However, we also encourage annotators to use the Internet as a tool to confirm their first guess from their initial analysis. We formulated these instructions around the assumption that the annotator is aware of climate change, can name examples of it, and generally knows the political orientations around the issue. The lettered points (a., b., etc.) provide guidance for interpretation of your research.

These steps should be followed.

*P(misinformation) means the likelihood of an article containing misinformation.

1. Skim the article to get a sense of the overall topic (does the article focus on environmental policy, a political event, etc.) and the writing style (opinionated or neutral).
 - a. Strong opinion that calls reader to action = \uparrow P(misinformation)
 - b. Present both sides of argument = \downarrow P(misinformation)
 - c. Poor grammar, exclamation points, or words in all caps = \uparrow P(misinformation)
2. Find the author's educational background and political orientation. This information can be found in the *About the Author* section before or after the article, or from a quick Google search of the author's name.
 - a. Advanced education degree = \downarrow P(misinformation)
 - b. Strong conservative orientation = \uparrow higher P(misinformation)

3. Research the news source. Google the following: "<news source name> credibility" or "<news source name> reliability". In the top results, look for articles, Q&A forums, or fact-checking websites (ex: mediabiasfactcheck.com) to give you insight into the level of credibility for that source. With the exception to websites like mediabiasfactcheck.com, you likely won't have to click on any search results; the previews should provide sufficient information. Considering the first 3-5 search results is acceptable.
 - a. Higher source credibility = \downarrow P(misinformation)
 - b. Supporting mainstream views = ambiguous, consider other evidence
4. Research the headline. Google search the headline or main topic of the paper and check
 - a) if other (credible) news sources discuss the issue and b) if they take similar views.
 - a. Similar views from recognizable news sources = \downarrow P(misinformation)
 - b. No one else is discussing the issue from the article or more news sources disagree with their view = \uparrow higher P(misinformation)

Use the evidence you gathered from the four steps to assign a misinformation rating score (described in detail below) to the article.

- All 4 pieces of evidence agree \rightarrow 1 or 5
- 3 pieces of evidence agree \rightarrow 2 or 4
- Pieces of evidence split 2-2 \rightarrow 3 or 6 (unknown)

We use the following four terms in our rating scale. We explicitly define them here for clarity.

Misinformation: an assertion of fact that is actually not true or just an opinion without real-world grounding. The purpose of misinformation is typically to actively deceive the reader so they agree with the given viewpoint (ex: The sky is green)

Credibility: an attribute of a piece of writing that contains mostly true evidence, with no misinformation. The purpose of a credible piece of writing is to inform the reader, and is typically neutral in stance. (ex: "The sky is blue" is a credible piece of writing)

Opinion: a non-objective view or judgement that may or may not be based on true facts. (ex: I believe blue is the best color for the sky to be)

True Evidence: an objective fact backed by real-world events or observations. True evidence tends to be repeated frequently in other sources (ex: The sky is blue)

The following scale should be used to assign the misinformation rating label to an article.

Misinformation Rating Scale (1-5)

1. **Very likely to contain misinformation:** contains one or more severe warning signs, including a low-traffic/unknown source, notoriously-biased author, or blatantly untrue/malicious content that calls on the reader to perform harmful actions. It is possible for an article to contain true evidence, but if it contains misinformation, it receives a 1

2. **Somewhat likely to contain misinformation:** contains warning signs regarding source, author, or content. Doesn't contain more than a couple of content warning signs, and lacks clearly malicious intent.
3. **Neutral:** contains no misinformation, but is unlikely to be credible. This could include opinion pieces that contain lots of non-factual information. May only contain relatively minor red flags.
4. **Somewhat likely credible:** contains mainly facts backed by true evidence, with an allowance for opinion and analysis. No evidence suggests the article contains any misinformation, and should have no warning flags
5. **Very likely credible:** contains only facts backed by **true evidence**, with relatively little **opinion** and analysis. No evidence suggests the article contains any **misinformation**, and no red flags regarding source, author, grammar/language, or content are immediately apparent. The author is clearly credible (has a graduate degree, has published other peer-reviewed work, has collaborated with other authors on pieces...). When looked up, the headline and article content is shared by other news sources.
6. **Unknown:** to be used when unsure about the credibility of the article. When the trustworthiness of the article is unclear or the given labels for a source are not unanimous, use this category in order to prevent false positives.

We have labeled the following articles as examples of our annotation scheme and have included a brief explanation for each annotation.

- <https://www.nytimes.com/2018/09/10/climate/united-nations-climate-change.html>: 5, reputable source and author with factual content
- <https://blogs.scientificamerican.com/observations/more-recycling-wont-solve-plastic-pollution/>: 4, reputable source and author, lots of facts, but contains analysis
- <https://www.westernjournal.com/report-poor-management-forests-global-warming-blame-widespread-wildfires/>: 3, somewhat questionable source and author, and questionable opinion, but written with an objective tone and first generation sources
- <https://dailycaller.com/2017/11/29/study-satellites-show-no-acceleration-in-global-warming-for-23-years/>: 1: known biased source, webpage has design flaws, known false information
- <https://www.iflscience.com/policy/epa-kill-off-obama-signature-plan-fight-climate-change/>: 2: author somewhat reputable, contains non-expository language,