May 21, 2018

Reliability Scoring Approach for Content Sources

Richard Farnsworth

RELIABILITY SCORING APPROACH FOR CONTENT SOURCES

ABSTRACT

Disclosed herein is an improved mechanism for providing a reliability scoring approach of content sources that publish publications (e.g., articles, videos, and/or any other suitable type of publication). The mechanism can assign attributes to different publications, such as a name of a content source that published a publication, a subject of a publication, facts in a publication, etc. The mechanism can also assign an initial reliability score for each content source. The mechanism can randomly select two publications, and can identify the publication published by the content source with the lower reliability score. The system can then compare facts of the two publications, and can adjust the reliability score of the content source with the lower reliability score based on the comparison of facts.

BACKGROUND

Users frequently view news-related content, such as videos, news articles, blog posts, etc. online. However, it can be difficult for a user to assess the accuracy and/or reliability of such news content. For example, although a particular content source (e.g., an online publication, a television channel, etc.) may not be a reliable source, it can be difficult for a user to determine that the content source is not reliable.

Moreover, content providers often have difficulty in determining whether a content source is reliable and, in some cases, this has led to providing favorable search rankings to content sources that may be depicting fake news and/or propaganda. Attempts by these content providers to filter the content items from these content sources also proves to be a difficult task as the particular facts of each piece of news-related content does not generally correlate to previous pieces of news-related content. In addition, such content sources generally attempt to

circumvent these filtering methods by, for example, closing an account associated with the content source and simply opening a new account for providing news-related content items.

Thus, there is a need for an improved mechanism for providing a reliability scoring approach of content sources.

DESCRIPTION

The systems and techniques described in this disclosure relate to scoring reliability of content sources. The system can be implemented on a server. FIG. 1 is an illustrative example of a method for providing a reliability scoring approach of content sources.

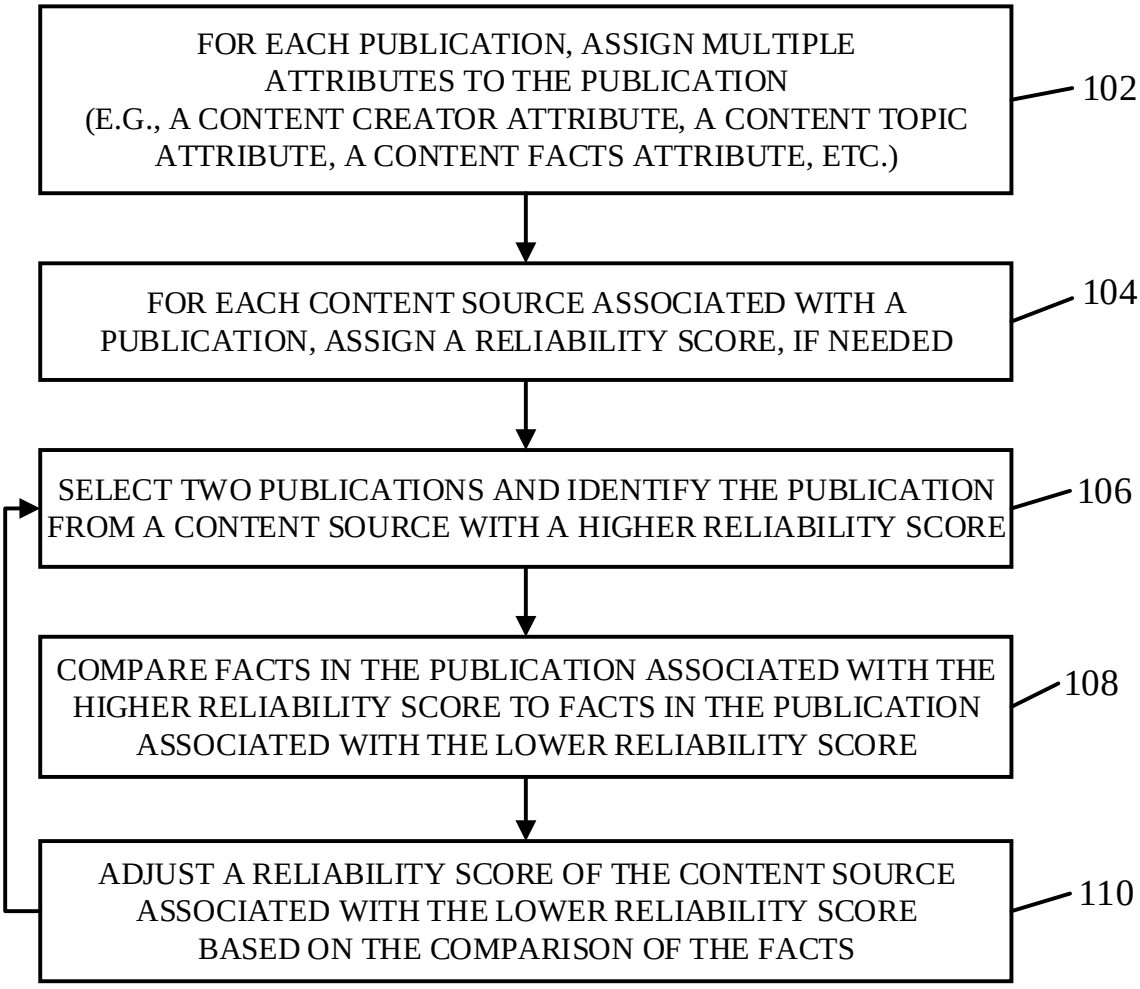

FIG. 1

At 102, the system can, for each publication in a group of publications, assign multiple attributes to the publication. In some instances, publications can include any suitable type of publications, such as articles, video content (e.g., television shows, portions of television shows, live-streamed video content, and/or any other suitable type of video content), audio content (e.g., radio shows, podcasts, and/or any other suitable type of audio content), blog posts, and/or any other suitable type of publication.

In some instances, attributes can include any suitable type of information associated with a publication. For example, a first attribute can be a content source that indicates a creator of the publication (e.g., a name of a newspaper or magazine the publication was published in, a name of a blog a blog post was published in, a television channel video content appeared on, and/or any other suitable creator). As another example, a second attribute can be a content topic. As a more particular example, a content topic can indicate a specific news topic, such as a particular news happening or subject, a name of a person associated with events described in the publication, and/or any other suitable type of news topic. As another more particular example, in an instance where a publication is a well-known satirical work (e.g., created by a known satire group, and/or known as satire based on any other suitable information), the content topic can be "Entertainment." As yet another example, a third attribute can be the content facts that are associated with the publication. As a more particular example, content facts can include any suitable facts stated in the publication, such as dates that particular events occurred, names of people associated with particular events described in the publication, and/or any other suitable facts. Note that, in some instances, any suitable number of attributes and any suitable types of attributes can be assigned to a publication.

In some instances, information about individual publications can be stored in any suitable manner. For example, a publication can be treated as a node (N) and each node can be associated with one or more attributes, such as a content source (S), a content subject, and/or content facts. Note that, in some instances, each attribute of a node (N) can itself be associated with any suitable attributes. For example, a content source (S) attribute can be associated with a reliability score, as described in more detail below.

At 104, the system can assign a reliability score for each content source that is associated with a publication, if needed. In some instances, a reliability score can be assigned to a content source in any suitable manner. For example, a reliability score can be manually assigned by a human evaluator. As a more particular example, the system can transmit the publication to a human evaluator and, in response, can receive a reliability score from the human evaluator. As another example, a reliability score can be automatically assigned by the system. As a more particular example, a content source can be assigned an initial reliability score that reflects a neutral score, such as a score of 1.0 or any other suitable score that reflects a neutral or unknown reliability on any suitable scale. In some instances, a reliability score can be a combination of any suitable factors, such as a combination of a previously-assigned reliability score, a human evaluator's score for the publication and/or for a content source associated with the publication, and/or any other suitable factors. In some instances, the reliability score can be on any suitable scale (e.g., 0.0 to 2.0, -10.0 to 10.0, and/or any other suitable scale). Note that, in some instances, the system can determine that a reliability score is not to be assigned to a particular content source, for example, a content source known for producing satirical publications or content.

The system can perform any suitable techniques for adjusting reliability scores of content sources, as described below.

At 106, the system can select two publications for comparison. It should be noted that the two publications can be selected in any suitable manner. For example, in some instances, the two publications can be selected randomly. As another example, in some instances, the two publications can be selected such that neither publication is associated with a particular content subject, such as "Entertainment." As yet another example, the two publications can be selected such that a content source associated with a first publication is different than a content source associated with a second publication.

The system can identify the publication of the two publications that is from a content source with a lower reliability score. For example, in an instance where a first publication (N1) is associated with a content source (S1) with a reliability score of 0.5 and a second publication (N2) is associated with a content source (S2) with a reliability score of 1.5, the system can identify the first publication (N1) as associated with a content source with a lower reliability score than the second publication (N2).

At 108, the system can compare content facts associated with the publication from the content source with the higher reliability score to content facts associated with the publication from the content source with the lower reliability score. In some instances, the system can treat the content facts associated with the publication from the content source with the higher reliability score as true facts. For example, continuing the example given above, in an instance where the first publication (N1) is associated with a content source (S1) with a reliability score of 0.5 and the second publication (N2) is associated with a content source (S2) with a reliability score of 1.5, the system can treat the content facts associated with publication (N2) as true facts.

At 110, the system can adjust the reliability score of the content source with the lower reliability score based on a comparison of the facts of the two content sources. For example, in an instance where the content facts included in the publication from the content source with the lower reliability score match the content facts included in the publication from the content source with the higher reliability score, the system can adjust the reliability score of the publication from the content source with the lower reliability score to be higher. As a more particular example, continuing the example given above where content source (S1) has a reliability score of 0.5, in response to determining that the content facts associated with publication (N1) match the content facts associated with publication (N2), the system can adjust the reliability score (S1) to a higher value, such as 0.8. As another example, in an instance where the content facts included in the publication from the content source with the lower reliability score do not match the content facts included in the publication from the content source with the higher reliability score, the system can adjust the reliability score of the content source with the lower reliability score to be lower. As a more particular example, continuing with the example given above where content source S1 has a reliability score of 0.5, in response to determining that the content facts associated with publication (N1) disagree with and/or are disproved by the content facts associated with publication (N2), the system can adjust the reliability score S1 to a lower value, such as 0.2. As yet another example, in an instance where the content facts included in the publication from the content source with the lower reliability score cannot be verified by the content facts included in the publication from the content source with the higher reliability score (e.g., if the two publications contain content facts related to different topics, and/or for any other suitable reason), the system can leave the reliability score of the content source with the lower reliability score unchanged.

In some instances, the system can adjust the reliability score associated with the publication with the lower reliability score by an amount determined by a degree of match or disagreement between the content facts of the two publications.

It should be noted that, in some instances, the rate of decreasing a reliability score associated with a content source (or reliability score loss), such as when a publication or content item includes content facts that have been disproved or otherwise not verified, can be significantly greater than the rate of increasing the reliability score associated with the content source, such as when a publication or content item includes content facts that have been verified. This can, for example, cause content sources to avoid even a few number of publications or other content items having content facts that may be disproved or otherwise not verified. In addition, this can, for example, encourage content sources to build up a reputation for providing truthful publications or other content items having content facts that will be verified. These publications or other content items can then be used to uncover less reputable publications and content items.

In some instances, the system can loop back to 106 and compare another pair of publications.

It should be noted that, in some instances, content sources can be limited in the rate at which a content source can upload publications and/or content items. For example, the system can place a limit that content sources cannot upload news-related content items faster than real-time.

In some instances, the system can use the reliability scores associated with content sources for any suitable purpose and in any suitable manner. For example, in some instances, the system can rank publications or other content items from content sources associated with higher

reliability scores higher, and can use the rankings to determine an order to present publications (e.g., in search results, as recommended content, and/or in any other suitable manner).