Metafact.io: Expert fact-checking at scale using the scientific method

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Abstract

Each minute, Google services 70,000 health queries - while search results vary wildly in quality, trust and truth. Meanwhile traditional fact-checking or new AI-based methods suffer from accuracy, trust and scalability issues. Our approach is to extract the expert consensus on any question by scaling up the scientific peer-review method. We have built a platform that verifies credentials and matches queries to a large expert community cohort to verify. This allows us to build an open, more trusted platform for knowledge for everyone.

1 The Problem

The PageRank algorithm was inspired by the scientific method in the form of aggregate citations as a form of quality for websites. The more links (ie citations) to a website implicitly means more importance. But many websites with lots of links are misleading or false allowing Google to amplify misinformation.

Meanwhile traditional fact-checking approaches suffer from trust and scale. Employing one journalist to check an article is not scalable given the volume of internet information, articles and posts. Facebook and Google are employing internal and external teams to verify the trustworthiness of information - but this approach is not scalable.

Automated fact-checking and machine learning approaches can help within structured data-sets but on complex, contextual information in health for example, training data-sets are severely lacking for AI to accurately provide trusted solutions just yet.

2 Scalable meta-science approach

Our approach to build a more trusted and scalable model for knowledge is three-fold:

1) Grow an online virtual expert community that has the scale and knowledge within their fields and industries to quickly fact-check information, articles or claims when needed.

2) Use technology methods to match queries with the most credible x number of experts to verify or reject information or claims.

3) Extract the uncertainty and consensus on any question or claim for an unlimited number of independent experts.

3 Prototype, APIs and future.

We have built a prototype platform that verifies credentials, matches queries and connects questions with a large expert community to answer. We launched the platform in April 2018 and have tested our approach with 1000 questions, 11,000 verified experts giving 2,500 answers.

Our goal is to create a scalable trusted fact-checking and knowledge platform that any individual or organization can use to verify content and questions they are interested in.

We are looking for partners and collaborators to build an API for their use in academia and beyond.