

Brian Mungal

CSCI 480

Bogert

2/9/25

Brief Proposal

Abstract

Web extensions are tools that help enhance the users browsing experience through tasks such as ad-blocking, password management, and content customization. A growing issue in research is evaluating credibility of articles, sources, and information to distinguish between well researched work and unreliable information. Existing tools such as NewsGuard, The Factual, Credibilator, and Captain Fact address aspects of news reliability, media bias, or misinformation, but often provide limited transparency regarding how credibility ratings are produced. This project presents SusAbility, a browser extension that computes an explainable credibility score for online articles by analyzing observable signals such as authorship, publication date, citation presence, and site-level indicators. The system presents users with both a numerical score and a breakdown of the factors contributing to that score, along with extracted references to support further verification. The extension was evaluated through time-based comparison tasks, perceived usefulness surveys, and measures of user awareness, demonstrating improved efficiency in assessing article credibility and increased user understanding of source quality.

Introduction

The rapid spread of online information has made it difficult for users to assess the credibility of articles and sources encountered during everyday web browsing. Recent changes to platform-level moderation and third-party fact-checking initiatives have further shifted the responsibility of evaluating information accuracy from institutions to individual users. As a result, readers are often left without transparent tools to help them judge the reliability of the content they consume. This project introduces SusAbility, a browser-based extension designed to assist users in evaluating the credibility of online articles by analyzing observable and explainable signals present on a webpage. SusAbility scans a given article for key indicators such as authorship, publication date, citation presence, and

site-level characteristics, and uses these signals to generate an overall credibility score. Unlike existing tools that provide opaque ratings, SusAbility presents users with a clear breakdown explaining how each signal contributed to the final score, allowing users to understand and critically engage with the assessment. The extension also extracts and displays cited sources and outbound references found within the article, enabling users to explore related material and conduct further verification when needed. By emphasizing transparency and user agency rather than automated truth judgments, SusAbility aims to support informed decision-making during online research. The primary users of SusAbility include students, researchers, and general web users who regularly encounter informational content online. Additional stakeholders include educators interested in promoting digital literacy and responsible research practices. Providing users with accessible tools for evaluating source quality is important for reducing the spread of unsupported or misleading information and encouraging more critical engagement with online content.