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|  | Cite | Abstract |
|  | @article{Dou2021UserPF,  title={User Preference-aware Fake News Detection},  author={Yingtong Dou and Kai Shu and Congyin Xia and Philip S. Yu and Lichao Sun},  journal={Proceedings of the 44th International ACM SIGIR Conference on Research and Development in Information Retrieval},  year={2021},  url={https://api.semanticscholar.org/CorpusID:233393714}  } | **User Preference-aware Fake News Detection**  Disinformation and fake news have posed detrimental effects on individuals and society in recent years, attracting broad attention to fake news detection. The majority of existing fake news detection algorithms focus on mining news content and/or the surrounding exogenous context for discovering deceptive signals; while the endogenous preference of a user when he/she decides to spread a piece of fake news or not is ignored. The confirmation bias theory has indicated that a user is more likely to spread a piece of fake news when it confirms his/her existing beliefs/preferences. Users' historical, social engagements such as posts provide rich information about users' preferences toward news and have great potentials to advance fake news detection. However, the work on exploring user preference for fake news detection is somewhat limited. Therefore, in this paper, we study the novel problem of exploiting user preference for fake news detection. We propose a new framework, UPFD, which simultaneously captures various signals from user preferences by joint content and graph modeling. Experimental results on real-world datasets demonstrate the effectiveness of the proposed framework. We release our code and data as a benchmark for GNN-based fake news detection: https://github.com/safe-graph/GNN-FakeNews. |
|  | @article{Kaliyar2021FakeBERTFN,  title={FakeBERT: Fake news detection in social media with a BERT-based deep learning approach},  author={Rohit Kumar Kaliyar and Anurag Goswami and Pratik Narang},  journal={Multimedia Tools and Applications},  year={2021},  volume={80},  pages={11765 - 11788},  url={https://api.semanticscholar.org/CorpusID:230800534}  } | **FakeBERT: Fake news detection in social media with a BERT-based deep learning approach**  In the modern era of computing, the news ecosystem has transformed from old traditional print media to social media outlets. Social media platforms allow us to consume news much faster, with less restricted editing results in the spread of fake news at an incredible pace and scale. In recent researches, many useful methods for fake news detection employ sequential neural networks to encode news content and social context-level information where the text sequence was analyzed in a unidirectional way. Therefore, a bidirectional training approach is a priority for modelling the relevant information of fake news that is capable of improving the classification performance with the ability to capture semantic and long-distance dependencies in sentences. In this paper, we propose a BERT-based (Bidirectional Encoder Representations from Transformers) deep learning approach (FakeBERT) by combining different parallel blocks of the single-layer deep Convolutional Neural Network (CNN) having different kernel sizes and filters with the BERT. Such a combination is useful to handle ambiguity, which is the greatest challenge to natural language understanding. Classification results demonstrate that our proposed model (FakeBERT) outperforms the existing models with an accuracy of 98.90%. |
|  | @article{Dou2021UserPF,  title={User Preference-aware Fake News Detection},  author={Yingtong Dou and Kai Shu and Congyin Xia and Philip S. Yu and Lichao Sun},  journal={Proceedings of the 44th International ACM SIGIR Conference on Research and Development in Information Retrieval},  year={2021},  url={https://api.semanticscholar.org/CorpusID:233393714}  } | **User Preference-aware Fake News Detection**  Disinformation and fake news have posed detrimental effects on individuals and society in recent years, attracting broad attention to fake news detection. The majority of existing fake news detection algorithms focus on mining news content and/or the surrounding exogenous context for discovering deceptive signals; while the endogenous preference of a user when he/she decides to spread a piece of fake news or not is ignored. The confirmation bias theory has indicated that a user is more likely to spread a piece of fake news when it confirms his/her existing beliefs/preferences. Users' historical, social engagements such as posts provide rich information about users' preferences toward news and have great potentials to advance fake news detection. However, the work on exploring user preference for fake news detection is somewhat limited. Therefore, in this paper, we study the novel problem of exploiting user preference for fake news detection. We propose a new framework, UPFD, which simultaneously captures various signals from user preferences by joint content and graph modeling. Experimental results on real-world datasets demonstrate the effectiveness of the proposed framework. We release our code and data as a benchmark for GNN-based fake news detection: https://github.com/safe-graph/GNN-FakeNews. |
|  | @article{Raza2022FakeND,  title={Fake news detection based on news content and social contexts: a transformer-based approach},  author={Shaina Raza and Chen Ding},  journal={International Journal of Data Science and Analytics},  year={2022},  volume={13},  pages={335 - 362},  url={https://api.semanticscholar.org/CorpusID:246434841}  } | **Fake news detection based on news content and social contexts: a transformer-based approach**  Fake news is a real problem in today’s world, and it has become more extensive and harder to identify. A major challenge in fake news detection is to detect it in the early phase. Another challenge in fake news detection is the unavailability or the shortage of labelled data for training the detection models. We propose a novel fake news detection framework that can address these challenges. Our proposed framework exploits the information from the news articles and the social contexts to detect fake news. The proposed model is based on a Transformer architecture, which has two parts: the encoder part to learn useful representations from the fake news data and the decoder part that predicts the future behaviour based on past observations. We also incorporate many features from the news content and social contexts into our model to help us classify the news better. In addition, we propose an effective labelling technique to address the label shortage problem. Experimental results on real-world data show that our model can detect fake news with higher accuracy within a few minutes after it propagates (early detection) than the baselines. |
|  | @article{Chen2022CrossmodalAL,  title={Cross-modal Ambiguity Learning for Multimodal Fake News Detection},  author={Yixuan Chen and Dongsheng Li and Peng Zhang and Jie Sui and Qin Lv and Lu Tun and Li Shang},  journal={Proceedings of the ACM Web Conference 2022},  year={2022},  url={https://api.semanticscholar.org/CorpusID:248367577}  } | **Cross-modal Ambiguity Learning for Multimodal Fake News Detection**  Cross-modal learning is essential to enable accurate fake news detection due to the fast-growing multimodal contents in online social communities. A fundamental challenge of multimodal fake news detection lies in the inherent ambiguity across different content modalities, i.e., decisions made from unimodalities may disagree with each other, which may lead to inferior multimodal fake news detection. To address this issue, we formulate the cross-modal ambiguity learning problem from an information-theoretic perspective and propose CAFE — an ambiguity-aware multimodal fake news detection method. CAFE consists of 1) a cross-modal alignment module to transform the heterogeneous unimodality features into a shared semantic space, 2) a cross-modal ambiguity learning module to estimate the ambiguity between different modalities, and 3) a cross-modal fusion module to capture the cross-modal correlations. CAFE improves fake news detection accuracy by judiciously and adaptively aggregating unimodal features and cross-modal correlations, i.e., relying on unimodal features when cross-modal ambiguity is weak and referring to cross-modal correlations when cross-modal ambiguity is strong. Experimental studies on two widely used datasets (Twitter and Weibo) demonstrate that CAFE outperforms state-of-the-art fake news detection methods by 2.2-18.9% and 1.7-11.4% on accuracy, respectively. |
|  | @article{Sharma2022FakeND,  title={Fake News Detection Using Machine Learning Algorithms},  author={Umang Sharma and Sidarth Saran and Dr Shankar M. Patil},  journal={Proceedings of the 2022 Fourteenth International Conference on Contemporary Computing},  year={2022},  url={https://api.semanticscholar.org/CorpusID:235387137}  } | **Fake News Detection Using Machine Learning Algorithms**  There has been an exponential growth in users sharing news and information in real-time on various social media platforms worldwide. However, few of the users share fake and misleading news for various reasons. The reasons for sharing fake news may not be limited to financial, personal, and/or political gain. Since users cannot determine or censor the type of content that appears on their respective platforms, fake news can pose significant and detrimental effects on an individual and society at large. In this regard, we have proposed the work with the primary objective of development of a fake news detection system by applying supervised machine learning algorithms on an annotated (labeled) dataset. The dataset was selected from Kaggle, consisting of fake news with 23503 entries and true news with 21418 entries. An overall better accuracies are observed with tree-based decision tree classifiers and a gradient boosting ensemble algorithm. |
|  | @article{Mosallanezhad2022DomainAF,  title={Domain Adaptive Fake News Detection via Reinforcement Learning},  author={Ahmadreza Mosallanezhad and Mansooreh Karami and Kai Shu and M. Mancenido and Huan Liu},  journal={Proceedings of the ACM Web Conference 2022},  year={2022},  url={https://api.semanticscholar.org/CorpusID:246867107}  } | **Domain Adaptive Fake News Detection via Reinforcement Learning**  With social media being a major force in information consumption, accelerated propagation of fake news has presented new challenges for platforms to distinguish between legitimate and fake news. Effective fake news detection is a non-trivial task due to the diverse nature of news domains and expensive annotation costs. In this work, we address the limitations of existing automated fake news detection models by incorporating auxiliary information (e.g., user comments and user-news interactions) into a novel reinforcement learning-based model called REinforced Adaptive Learning Fake News Detection (REAL-FND). REAL-FND exploits cross-domain and within-domain knowledge that makes it robust in a target domain, despite being trained in a different source domain. Extensive experiments on real-world datasets illustrate the effectiveness of the proposed model, especially when limited labeled data is available in the target domain. |
|  | @article{Min2022DivideandConquerPI,  title={Divide-and-Conquer: Post-User Interaction Network for Fake News Detection on Social Media},  author={Erxue Min and Yu Rong and Yatao Bian and Tingyang Xu and Peilin Zhao and Junzhou Huang and Sophia Ananiadou},  journal={Proceedings of the ACM Web Conference 2022},  year={2022},  url={https://api.semanticscholar.org/CorpusID:248367526}  } | **Divide-and-Conquer: Post-User Interaction Network for Fake News Detection on Social Media**  Fake News detection has attracted much attention in recent years. Social context based detection methods attempt to model the spreading patterns of fake news by utilizing the collective wisdom from users on social media. This task is challenging for three reasons: (1) There are multiple types of entities and relations in social context, requiring methods to effectively model the heterogeneity. (2) The emergence of news in novel topics in social media causes distribution shifts, which can significantly degrade the performance of fake news detectors. (3) Existing fake news datasets usually lack of great scale, topic diversity and user social relations, impeding the development of this field. To solve these problems, we formulate social context based fake news detection as a heterogeneous graph classification problem, and propose a fake news detection model named Post-User Interaction Network (PSIN), which adopts a divide-and-conquer strategy to model the post-post, user-user and post-user interactions in social context effectively while maintaining their intrinsic characteristics. Moreover,we adopt an adversarial topic discriminator for topic-agnostic feature learning, in order to improve the generalizability of our method for new-emerging topics. Furthermore, we curate a new dataset for fake news detection, which contains over 27,155 news from 5 topics, 5 million posts, 2 million users and their induced social graph with 0.2 billion edges. It has been published on https://github.com/qwerfdsaplking/MC-Fake. Extensive experiments illustrate that our method outperforms SOTA baselines in both in-topic and out-of-topic settings. |
|  | @article{Tembhurne2022McDNNFN,  title={Mc-DNN: Fake News Detection Using Multi-Channel Deep Neural Networks},  author={Jitendra V. Tembhurne and Md. Moin Almin and Tausif Diwan},  journal={Int. J. Semantic Web Inf. Syst.},  year={2022},  volume={18},  pages={1-20},  url={https://api.semanticscholar.org/CorpusID:246925309}  } | **Mc-DNN: Fake News Detection Using Multi-Channel Deep Neural Networks**  With the advancement of technology, social media has become a major source of digital news due to its global exposure. This has led to an increase in spreading fake news and misinformation online. Humans cannot differentiate fake news from real news because they can be easily influenced. A lot of research work has been conducted for detecting fake news using Artificial Intelligence and Machine Learning. A large number of deep learning models and their architectural variants have been investigated and many websites are utilizing these models directly or indirectly to detect fake news. However, state-of-the-arts demonstrate the limited accuracy in distinguishing fake news from the original news. We propose a multi-channel deep learning model namely Mc-DNN, leveraging and processing the news headlines and news articles along different channels for differentiating fake or real news. We achieve the highest accuracy of 99.23% on ISOT Fake News Dataset and 94.68% on Fake News Data for Mc-DNN. Thus, we highly recommend the use of Mc-DNN for fake news detection. |
|  | @article{Seddari2022AHL,  title={A Hybrid Linguistic and Knowledge-Based Analysis Approach for Fake News Detection on Social Media},  author={Noureddine Seddari and Abdelouahid Derhab and Mohamed Belaoued and Waleed Halboob and Jalal Al-Muhtadi and Abdelghani Bouras},  journal={IEEE Access},  year={2022},  volume={PP},  pages={1-1},  url={https://api.semanticscholar.org/CorpusID:249526926}  } | **A Hybrid Linguistic and Knowledge-Based Analysis Approach for Fake News Detection on Social Media**  The rapid development of different social media and content-sharing platforms has been largely exploited to spread misinformation and fake news that make people believing in harmful stories, which allow to influence public opinion, and could cause panic and chaos among population. Thus, fake news detection has become an important research topic, aiming at flagging a specific content as fake or legitimate. The fake news detection solutions can be divided into three main categories: content-based, social context-based, and knowledge-based approaches. In this paper, we propose a novel hybrid fake news detection system that combines linguistic and knowledge-based approaches and inherits their advantages, by employing two different sets of features: (1) linguistic features (i.e., title, number of words, reading ease, lexical diversity,and sentiment), and (2) a novel set of knowledge-based features, called fact-verification features that comprise three types of information namely, (i) reputation of the website where the news is published, (ii) coverage, i.e., number of sources that published the news, and (iii) fact-check, i.e., opinion of well-known fact-checking websites about the news, i.e., true or false. The proposed system only employs eight features, which is less than most of the state-of-the-art approaches. Also, the evaluation results on a fake news dataset show that the proposed system employing both types of features can reach an accuracy of 94.4%, which is better compared to that obtained from separately employing linguistic features (i.e., accuracy=89.4% ) and fact-verification features (i.e., accuracy=81.2%). |
| 11 | @article{Manzoor2019FakeND,  title={Fake News Detection Using Machine Learning approaches: A systematic Review},  author={Syed Ishfaq Manzoor and Jimmy Singla and Nikita},  journal={2019 3rd International Conference on Trends in Electronics and Informatics (ICOEI)},  year={2019},  pages={230-234},  url={https://api.semanticscholar.org/  CorpusID:204230271}  } | TLDR  Various Machine learning approaches in detection of fake and fabricated news are reviewed and the limitation of such and approaches and improvisation by way of implementing deep learning is also reviewed.  Abstract  The easy access and exponential growth of the information available on social media networks has made it intricate to distinguish between false and true information. The easy dissemination of information by way of sharing has added to exponential growth of its falsification. The credibility of social media networks is also at stake where the spreading of fake information is prevalent. Thus, it has become a research challenge to automatically check the information viz a viz its source, content and publisher for categorizing it as false or true. Machine learning has played a vital role in classification of the information although with some limitations. This paper reviews various Machine learning approaches in detection of fake and fabricated news. The limitation of such and approaches and improvisation by way of implementing deep learning is also reviewed. |
| 12 | @article{Nath2021StudyOF,  title={Study of Fake News Detection using Machine Learning and Deep Learning Classification Methods},  author={Keshav Nath and Priyansh Soni and Anjum and Aman Ahuja and Rahul Katarya},  journal={2021 International Conference on Recent Trends on Electronics, Information, Communication \& Technology (RTEICT)},  year={2021},  pages={434-438},  url={https://api.semanticscholar.org/  CorpusID:240156540}  } | TLDR  It is discovered that TF-IDF outperforms other feature extraction methods and Random Forest and Bag of Words on the FARN Dataset outperformed the rest with an accuracy of 98.8%.  Abstract  False or misleading information, created deliberately to misinform and deceive the reader, is referred to as Fake News. As the most extensively utilized network for disseminating information, social media has become a highly popular platform for individuals to propagate incorrect information. Fake news can be pernicious when it comes to specific individuals and their opinions and perceptions, influencing and misleading their actions. Several initiatives have been taken in the past to reduce the spread of fake news and detect inaccurate information by devoting a significant amount of time and effort. In this paper, we have compared the performance of various Machine Learning and Deep Learning models for Fake News Detection. For our study, we used four datasets. From our experimentation, we realized that Random Forest and Bag of Words on the FARN Dataset outperformed the rest with an accuracy of 98.8%. In addition, we discovered that TF-IDF outperforms other feature extraction methods. |
| 13 | @article{Jaybhaye2023FakeND,  title={Fake News Detection using LSTM based deep learning approach},  author={Sangita M. Jaybhaye and Vivek Badade and Aryan Dodke and Apoorva Holkar and Priyanka Lokhande},  journal={ITM Web of Conferences},  year={2023},  url={https://api.semanticscholar.org/  CorpusID:260801858}  } | TLDR  This paper presents a comprehensive review of ML and DL based approaches for fake news detection, and provides insights and guidance for researchers and practitioners interested in developing effectivefake news detection systems using ML andDL approaches.  Abstract  The identification of false information has become a critical concern in the modern era of technology, as the ready availability of information and widespread utilization of social media platforms have accelerated the dissemination of inaccurate news. The ability to accurately identify false news can help to mitigate the negative effects of misinformation, such as public confusion, political polarization, and potential harm to public health and safety. This paper presents a comprehensive review of ML and DL based approaches for fake news detection. Our review provides insights and guidance for researchers and practitioners interested in developing effective fake news detection systems using ML and DL approaches. News reporters often need to verify authenticity of news stories before publishing or reporting them. By utilizing fake news detection models, reporters can filter out fake news and focus on reporting accurate and reliable information. |
| 14 | @article{Reis2019SupervisedLF,  title={Supervised Learning for Fake News Detection},  author={Julio C. S. Reis and Andr{\'e} Correia and Fabricio Murai and Adriano Veloso and Fabr{\'i}cio Benevenuto and E. Cambria},  journal={IEEE Intelligent Systems},  year={2019},  volume={34},  pages={76-81},  url={https://api.semanticscholar.org/CorpusID:85548285}  } | TLDR  A new set of features is presented and the prediction performance of current approaches and features for automatic detection of fake news are measured, revealing interesting findings on the usefulness and importance of features for detecting false news.  Abstract  A large body of recent works has focused on understanding and detecting fake news stories that are disseminated on social media. To accomplish this goal, these works explore several types of features extracted from news stories, including source and posts from social media. In addition to exploring the main features proposed in the literature for fake news detection, we present a new set of features and measure the prediction performance of current approaches and features for automatic detection of fake news. Our results reveal interesting findings on the usefulness and importance of features for detecting false news. Finally, we discuss how fake news detection approaches can be used in the practice, highlighting challenges and opportunities. |
| 15 | @article{Kumar2023ApproachesTF,  title={Approaches towards Fake News Detection using Machine Learning and Deep Learning},  author={Nitish Kumar and Dr. Nirmalya Kar},  journal={2023 10th International Conference on Signal Processing and Integrated Networks (SPIN)},  year={2023},  pages={280-285},  url={https://api.semanticscholar.org/CorpusID:258592784}  } | TLDR  The analysis of recently published papers in this domain and the analysis of different techniques for detecting fake news using different natural language processing, machine learning, and Deep Learning Techniques are focused on.  Abstract  Fake news evolving around us for a very long time. The gradual growth of social media platforms has provided us with an easily accessible and publishable news platform in front of the audience that news may be true or False. The spreading of fake news increased as compared to ancient times. Nowadays Fake news detection become a tough challenge for Both Natural language processing(NLP) and Machine Learning (ML) experts. For detecting fake news fact-checking is also very important. In this paper, we focus on the analysis of recently published papers in this domain and the analysis of different techniques for detecting fake news. Through this survey, we will get inside knowledge of the detection process of fake news using different natural language processing, machine learning, and Deep Learning Techniques. |
| 16 | @article{Oshikawa2018ASO,  title={A Survey on Natural Language Processing for Fake News Detection},  author={Ray Oshikawa and Jing Qian and William Yang Wang},  journal={ArXiv},  year={2018},  volume={abs/1811.00770},  url={https://api.semanticscholar.org/CorpusID:53296658}  } | TLDR  The challenges involved in fake news detection are described and the task formulations, datasets and NLP solutions that have been developed for this task are compared, and the potentials and limitations of them are discussed.  Abstract  Fake news detection is a critical yet challenging problem in Natural Language Processing (NLP). The rapid rise of social networking platforms has not only yielded a vast increase in information accessibility but has also accelerated the spread of fake news. Given the massive amount of Web content, automatic fake news detection is a practical NLP problem required by all online content providers. This paper presents a survey on fake news detection. Our survey introduces the challenges of automatic fake news detection. We systematically review the datasets and NLP solutions that have been developed for this task. We also discuss the limits of these datasets and problem formulations, our insights, and recommended solutions. |
| 17 | @inproceedings{Schtz2021DetectionAI,  title={Detection and Identification of Fake News},  author={Mina Sch{\"u}tz},  year={2021},  url={https://api.semanticscholar.org/CorpusID:253549137}  } | TLDR  It is concluded that transformer models, such as BERT, are a promising approach to detect fake news, since it achieves notable results, even without using a large dataset.  Abstract  Fake news has emerged as a critical problem for society and professional journalism. Many individuals consume their news via online media, such as social networks and news websites. Therefore, the demand for automatic fake news detection is increasing. There is still no agreed upon definition for fake news, since it can include various concepts, such as clickbait, propaganda, satire, hoaxes, and rumors. This results in a broad landscape of machine learning approaches, which have a varying accuracy in detecting fake news. This masterthesis focused on a binary content-based classification approach, with a bidirectional Transformer (BERT), to detect fake news in online articles. BERT creates a pretrained language model during training and is fine-tuned on a labeled dataset. The FakeNewsNet dataset is used to test two variants of the model (cased / uncased) with articles, using only the body text, the title, and a concatenation of both. Additionally, both models were tested with different preprocessing steps. The models gain in all 29 carried out experiments high accuracy results, without overfitting. Using the body text and the concatenation resulted in five models with an accuracy of 87% after testing, whereas using only titles resulted in 84%. This shows that short statements could be already enough for fake news detection using language models. Also, the preprocessing steps seem to have no major impact on the predictions. It is concluded that transformer models, such as BERT, are a promising approach to detect fake news, since it achieves notable results, even without using a large dataset. |
| 18 | @article{Sharma2019CombatingFN,  title={Combating Fake News},  author={Karishma Sharma and Feng Qian and He Jiang and Natali Ruchansky and Ming Zhang and Yan Liu},  journal={ACM Transactions on Intelligent Systems and Technology (TIST)},  year={2019},  volume={10},  pages={1 - 42},  url={https://api.semanticscholar.org/CorpusID:229296860}  } | TLDR  This survey describes the modern-day problem of fake news and, in particular, highlights the technical challenges associated with it and comprehensively compile and summarize characteristic features of available datasets.  Abstract  The proliferation of fake news on social media has opened up new directions of research for timely identification and containment of fake news and mitigation of its widespread impact on public opinion. While much of the earlier research was focused on identification of fake news based on its contents or by exploiting users’ engagements with the news on social media, there has been a rising interest in proactive intervention strategies to counter the spread of misinformation and its impact on society. In this survey, we describe the modern-day problem of fake news and, in particular, highlight the technical challenges associated with it. We discuss existing methods and techniques applicable to both identification and mitigation, with a focus on the significant advances in each method and their advantages and limitations. In addition, research has often been limited by the quality of existing datasets and their specific application contexts. To alleviate this problem, we comprehensively compile and summarize characteristic features of available datasets. Furthermore, we outline new directions of research to facilitate future development of effective and interdisciplinary solutions. |
| 19 | @article{Alghamdi2022TowardsFN,  title={Towards Fake News Detection on Social Media},  author={Jawaher Alghamdi and Yuqing Lin and Suhuai Luo},  journal={2022 21st IEEE International Conference on Machine Learning and Applications (ICMLA)},  year={2022},  pages={148-153},  url={https://api.semanticscholar.org/CorpusID:257721001}  } | TLDR  The definitions of fake news and the related terms that have often co-occurred with the term fake news are discussed and it is suggested that content and context-based features are necessary for better performance offake news detection.  Abstract  The dissemination of fake news on the Internet has resulted in worrying negative implications for individuals and society. This paper begins by discussing the definitions of fake news and the related terms that have often co-occurred with the term fake news. Then, we summarised several social science theories characterising fake news spreading. Next, we discussed the state-of-the-art techniques for detecting fake news using news content and user context information. Finally, we conducted a case study that demonstrates that the interplay between news content and context-based features helps uncover useful patterns to discriminate fake from real news. Our study suggests that content and context-based features are necessary for better performance of fake news detection. |
| 20 | @inproceedings{Klein2017FakeNA,  title={Fake News: A Legal Perspective},  author={David O. Klein and Joshua R. Wueller},  year={2017},  url={https://api.semanticscholar.org/CorpusID:157545529}  } | The concept of “fake news” has garnered substantial attention in recent years, evolving from its satirical literary origins into a passionately criticized Internet phenomenon. Whether described as rumors, “counterknowledge,” misinformation, “post-truths,” “alternative facts” or just plain damned lies, these false statements of fact typically are published on Web sites and disseminated via social media for profit or social influence.  While fake news publishers are regularly taken to task in the court of public opinion, we are unaware of any prior structured discussion of the unique legal issues surrounding the publication of fake news. This article evaluates examples of fake news publications to present a workable definition of “fake news” for purposes of our legal analysis. We then explore many of the legal and regulatory hurdles facing online fake news publishers. This article concludes by discussing some of the legal protections available to fake news publications and publishers of other online content |
| 21 | @article{Iufereva2023FakeNA,  title={Fake news as a distortion of media reality: tell-truth strategy in the post-truth era},  author={Anastasiia Iufereva},  journal={European Conference on Cyber Warfare and Security},  year={2023},  url={https://api.semanticscholar.org/CorpusID:259291317}  } | TLDR  The author describes the key characteristics of fake news and the elements of this tell-truth strategy and focuses on both professional journalists and professors who may use the results of this investigation in such courses as political science, sociology, philosophy, and journalism.  Abstract  The article deals with fake news which has been considered one of the greatest threats to information security. The expansion of digital technologies and the development of communication networks have contributed to the spreading of misinformation. In particular, the emergence of different sources of information on the Internet, the growing polarization of opinions in the political and socio-economic dimensions, the devaluation of the fact, and the widespread fake news on the Internet (e.g., social media) form the question of revision of the process of collecting, verifying presenting information, methods, and technologies for verifying facts, including methods for countering fake news. Although this issue has been widely investigated in academic discourse, there are still controversial arguments regarding which elements should form a tell-truth strategy. This paper focuses on recent research that reflects trends and patterns in this field and on the author’s empirical survey - interviews with university professors and media experts (N=6), journalists (N=6), and students (N=14) in Russia. In this study, the author describes the key characteristics of fake news and the elements of this tell-truth strategy. It is intended that this paper focuses on both professional journalists and professors who may use the results of this investigation in such courses as political science, sociology, philosophy, and journalism. |
| 22 | Molina, M. D., Sundar, S. S., Le, T., & Lee, D. (2021). “Fake News” Is Not Simply False Information: A Concept Explication and Taxonomy of Online Content. American Behavioral Scientist, 65(2), 180-212. https://doi.org/10.1177/0002764219878224 | Taxonomy of Online Content for “Fake News” Detection  In our taxonomy, we identify eight categories of online content for the purpose of algorithm-based detection of “fake news:” real news, false news, polarized content, satire, misreporting, commentary, persuasive information, and citizen journalism. These categories are organized based on a combination of unique features derived and compiled from the various conceptual and operational definitions proposed for fabricated news through our meaning analysis. Such features include characteristics related to the message and its linguistic properties, its sources and intentions, structural components, and network characteristics. In the next section, we will first differentiate between real news and false news. Then, we identify online content that is not false news, but that could be misinterpreted by audience as false news. These types of online content are important to identify for the sake of building a taxonomy that has discriminant validity in ruling out content that is not false. Once identified, we can build algorithms to label the varied forms of news that exist between the binary categories of real and false, so that the reader can factor that in their consumption of such information or discourse. It will also serve to reduce reactance that is known to occur when readers are told that a piece of news which aligns well with their political beliefs is indeed false in a blanket manner. Providing a more nuanced labeling of partisan content, for example, without declaring it outright as false, can serve to balance the need for identifying content that is completely false and made-up and recognizing content in which truthfulness might be contested, as might be the case with partisan and persuasive content. This will also help enhance credibility of the algorithm and greater acceptance of its classification of different kinds of real and false news and the various shades in between the two… |
| 23 | @article{M2023ThePO,  title={The Phenomenon of Fake News (Hoax) in Mass Communication: Causes, Impacts, and Solutions},  author={Deddy Satria M and Hairunnisa},  journal={Open Access Indonesia Journal of Social Sciences},  year={2023},  url={https://api.semanticscholar.org/CorpusID:258919953}  } | TLDR  The impact of fake news is very detrimental and can disrupt social stability, public trust, and information integrity, so collective efforts and awareness of the importance of fighting fake news are very important in building a healthy and trustworthy mass communication environment.  Abstract  challenge faced in the digital era. The spread of fake news can have detrimental effects, such as disrupting public opinion, influencing democratic processes, creating social chaos, and damaging the reputation of individuals or organizations. The main causes for the emergence of fake news include technological factors, political motivation, economic gain, ignorance or lack of media literacy, and psychological factors such as the need for validation or sensation. Advances in technology and social media have accelerated the spread of fake news and complicated efforts to contain it. It is important to tackle the fake news phenomenon with a holistic approach. This involves the active role of individuals, news organizations, journalists, social media platforms, government agencies, and society as a whole. Increasing media literacy, accurate verification of facts, ethical journalism, cooperation with social media platforms, proper regulation, and prompt response to fake news are important steps in dealing with this phenomenon. The impact of fake news is very detrimental and can disrupt social stability, public trust, and information integrity. Therefore, collective efforts and awareness of the importance of fighting fake news are very important in building a healthy and trustworthy mass communication environment. |
| 24 | @article{Rocha2021TheIO,  title={The impact of fake news on social media and its influence on health during the COVID-19 pandemic: a systematic review},  author={Yasmim Mendes Rocha and Gabriel Ac{\'a}cio de Moura and Gabriel Alves Desid{\'e}rio and Carlos Henrique de Oliveira and Francisco Dantas Lourenço and Larissa Deadame de Figueiredo Nicolete},  journal={Zeitschrift Fur Gesundheitswissenschaften},  year={2021},  pages={1 - 10},  url={https://api.semanticscholar.org/CorpusID:238530721}  } | TLDR  By analyzing the phenomenon of fake news in health, it was possible to observe that infodemic knowledge can cause psychological disorders and panic, fear, depression, and fatigue.  Abstract  Purpose As the new coronavirus disease propagated around the world, the rapid spread of news caused uncertainty in the population. False news has taken over social media, becoming part of life for many people. Thus, this study aimed to evaluate, through a systematic review, the impact of social media on the dissemination of infodemic knowing and its impacts on health. Methods A systematic search was performed in the MedLine, Virtual Health Library (VHL), and Scielo databases from January 1, 2020, to May 11, 2021. Studies that addressed the impact of fake news on patients and healthcare professionals around the world were included. It was possible to methodologically assess the quality of the selected studies using the Loney and Newcastle–Ottawa Scales. Results Fourteen studies were eligible for inclusion, consisting of six cross-sectional and eight descriptive observational studies. Through questionnaires, five studies included measures of anxiety or psychological distress caused by misinformation; another seven assessed feeling fear, uncertainty, and panic, in addition to attacks on health professionals and people of Asian origin. Conclusion By analyzing the phenomenon of fake news in health, it was possible to observe that infodemic knowledge can cause psychological disorders and panic, fear, depression, and fatigue. |
| 25 | @article{Mishra2021ImpactOF,  title={Impact of fake news on social image perceptions and consumers’ behavioral intentions},  author={Anubhav A. Mishra and Sridhar Samu},  journal={Journal of Consumer Marketing},  year={2021},  url={https://api.semanticscholar.org/CorpusID:238644072}  } | Purpose  This paper aims to examine how content relevancy influences consumers’ preference to receive and share fake news. Further, it investigates how these receivers perceive the social image of the people who share fake news. Finally, this study examines how brand strength and valence and credibility of fake content influence consumer’s word-of-mouth recommendations, purchase intentions and attitude toward the brand.  Design/methodology/approach  Three experiments were conducted to test the hypotheses. The data was analyzed using a two-way analysis of variance and PROCESS techniques.  Findings  Findings indicate that people prefer to receive and share relevant content, even if it is fake. Sharing fake news conveys the sender’s sociability but also creates a negative perception of narcissism. Individuals are more likely to recommend a brand if the fake news is perceived as credible and positive (vs negative). Finally, brand-strength can help brands to negate the harmful effects of fake news.  Research limitations/implications  Future research can explore the role of group dynamics, tie-strength and media richness (text, image and videos) in the dispersion of fake news and its impact on brands.  Practical implications  Marketers should communicate and educate consumers that sharing fake content can harm their social image, which can reduce information dispersion. Marketers should also improve brand-strength that can protect the brand against the adverse impact of fake news.  Originality/value  This study contributes to the emerging literature on fake news by studying the impact of fake news on consumer intentions and attitudes toward the brand, which are critical for the success of any brand. |

**I.Giới thiệu:**

-Trong thời đại kỹ thuật số ngày nay, sự phổ biến của thông tin sai lệch đã trở thành mối lo ngại cấp bách, tràn ngập mọi khía cạnh trong cuộc sống trực tuyến của chúng ta. Tin giả, thường được ngụy trang dưới dạng thông tin hợp pháp, có sức mạnh gây ảnh hưởng đến dư luận, kích động nỗi sợ hãi và hận thù, thậm chí ảnh hưởng đến các cuộc bầu cử. VD: Một số tin giả liên quan đến dịch COVID-19 [4],… Vì vậy, nhu cầu về cơ chế phát hiện tin giả hiệu quả chưa bao giờ quan trọng hơn thế.

Phát hiện tin giả là quá trình xác định và vạch trần thông tin sai lệch hoặc gây hiểu lầm được phổ biến thông qua các kênh truyền thông khác nhau, đặc biệt là các nền tảng trực tuyến và mạng xã hội. Thách thức đa chiều này đòi hỏi một cách tiếp cận toàn diện, tích hợp các tiến bộ công nghệ, kỹ năng tư duy phê phán và nỗ lực hợp tác từ các cá nhân, tổ chức và chính phủ.

Đi đầu trong việc phát hiện tin tức giả là các thuật toán tiên tiến và kỹ thuật máy học. Những công nghệ này phân tích lượng dữ liệu khổng lồ, bao gồm nội dung văn bản, hình ảnh và siêu dữ liệu để xác định các mẫu biểu thị thông tin sai lệch. Ví dụ: thuật toán xử lý ngôn ngữ tự nhiên (NLP) có thể nhận ra sự mâu thuẫn về ngữ nghĩa và các tín hiệu ngôn ngữ có thể báo hiệu ý định lừa đảo [3]. Tương tự, các công cụ phân tích hình ảnh và video sử dụng tìm kiếm hình ảnh ngược và các kỹ thuật khác để xác minh tính xác thực của nội dung trực quan, hoặc sử dụng phương pháp học máy, học sâu [10], sử dụng phân tích cảm tính [15] để phát hiện các tin tức giả mạo trên các nền tảng mạng xã hội đang ngày càng gia tăng như hiện nay [10].

Tuy nhiên, chỉ riêng giải pháp công nghệ là không đủ để chống lại tính chất phức tạp và ngày càng phát triển của tin tức giả. Sự can thiệp của con người vẫn không thể thiếu trong quá trình xác minh. Những người xác minh sự thật và nhà báo đóng vai trò quan trọng trong việc xem xét kỹ lưỡng những tuyên bố đáng ngờ, chứng thực thông tin từ nhiều nguồn và cung cấp bối cảnh để phân biệt sự thật và sự giả dối. Hơn nữa, việc nâng cao hiểu biết về truyền thông và kỹ năng tư duy phản biện trong công chúng là điều cần thiết để trao quyền cho các cá nhân trong việc phân biệt các nguồn đáng tin cậy với những nguồn không đáng tin cậy.

Sự hợp tác giữa các bên liên quan khác nhau là điều cần thiết để chống lại sự lan truyền của tin tức giả một cách hiệu quả. Các công ty công nghệ, nền tảng truyền thông xã hội, tổ chức học thuật và cơ quan chính phủ phải hợp tác để phát triển và triển khai hệ thống phát hiện tin tức giả mạo mạnh mẽ. Điều này liên quan đến việc chia sẻ dữ liệu, tài nguyên và chuyên môn để nâng cao tính chính xác và hiệu quả của các thuật toán phát hiện đồng thời bảo vệ quyền riêng tư và quyền tự do ngôn luận của người dùng.

Hơn nữa, cần có các khuôn khổ và chính sách pháp lý để buộc những người cung cấp tin giả phải chịu trách nhiệm về hành động của họ. Các chính phủ phải ban hành luật nhằm