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Bias and Double Standard in Western Social Media and News Outlets : The Ukrainian War v.s. the Syrian Crisis as a Case Study

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Abstract

The increasing reliance on social media and online news platforms as primary sources of information has given rise to concerns about the prevalence of biases, double standards, and misinformation, particularly when covering politically sensitive issues. This study aims to investigate and analyze biases in western social media and news outlets, using the Ukrainian war and the Syrian crisis as case studies. The objectives are to determine whether biases are intentional or accidental, assess the impact of political polarization on bias, and examine if biases arise due to the nature of political relationships between platforms and news subjects.

The methodology includes data collection from news platforms and social media (mainly Twitter), sentiment analysis, temporal analysis using time series representation, time series classification using temporal distances, and symbolic representation of sentiments and pattern discovery. A variety of skills such as deep learning, natural language processing, computer vision, web programming, machine learning, and databases are employed to accomplish these tasks.

By comparing media coverage of the Ukrainian war and the Syrian crisis, this research seeks to understand the underlying factors that contribute to differing treatment of refugees and the prejudgment of war actions. The findings of this study aim to offer valuable insights into the role of social media and news platforms in shaping public opinion and political discourse, ultimately contributing to a deeper understanding of the mechanisms behind bias and double standards in the digital media landscape.

Keywords: Bias, Machine Learning, Deep Learning, Natural Language Processing, Sentiment Analysis.

Resumé

La dépendance croissante des médias sociaux et des plateformes de presse en ligne en tant que sources primaires d'information a suscité des préoccupations quant à la prévalence des biais, des doubles standards et de la désinformation, en particulier lorsqu'il s'agit de couvrir des questions politiquement sensibles. Cette étude vise à examiner et à analyser les biais dans les médias sociaux occidentaux et les médias d'information, en utilisant la guerre ukrainienne et la crise syrienne comme études de cas. Les objectifs sont de déterminer si les biais sont intentionnels ou accidentels, d'évaluer l'impact de la polarisation politique sur les biais et d'examiner si les biais résultent de la nature des relations politiques entre les plateformes et les sujets d'actualité.

La méthodologie comprend la collecte de données auprès des plateformes d'information et des médias sociaux (principalement Twitter), l'analyse des sentiments, l'analyse temporelle à l'aide de représentations de séries chronologiques, la classification de séries chronologiques à l'aide de distances temporelles, ainsi que la représentation symbolique des sentiments et la découverte de motifs. Une variété de compétences telles que l'apprentissage profond, le traitement du langage naturel, la vision par ordinateur, la programmation web, l'apprentissage automatique et les bases de données sont mises en œuvre pour accomplir ces tâches.

En comparant la couverture médiatique de la guerre ukrainienne et de la crise syrienne, cette recherche vise à comprendre les facteurs sous-jacents qui contribuent aux différences de traitement des réfugiés et au préjugé des actions de guerre. Les résultats de cette étude visent à fournir des informations précieuses sur le rôle des médias sociaux et des plateformes d'information dans la formation de l'opinion publique et du discours politique, contribuant ainsi à une compréhension plus approfondie des mécanismes sous-jacents des biais et des doubles standards dans le paysage médiatique numérique.

Mots-clés : Biais, Apprentissage automatique, Apprentissage profond, Traitement du langage naturel, Analyse des sentiments.

ملخص

الاعتماد المتزايد على وسائل التواصل الاجتماعي ومنصات الأخبار عبر الإنترنت كمصادر أساسية للمعلومات أدى إلى ظهور مخاوف بشأن انتشار التحيز والمعايير المزدوجة والمعلومات الخاطئة، خاصة عندما يتعلق الأمر بالقضايا السياسية الحساسة. تهدف هذه الدراسة إلى التحقيق وتحليل التحيزات في وسائل التواصل الاجتماعي ومنافذ الأخبار الغربية، باستخدام الحرب الأوكرانية والأزمة السورية كدراسات حالة. الأهداف هي تحديد ما إذا كانت التحيزات مقصودة أم عرضية، وتقييم تأثير التطرف السياسي على التحيز، وفحص ما إذا كانت التحيزات تنشأ بسبب طبيعة العلاقات السياسية بين المنصات ومواضيع الأخبار.

تتضمن المنهجية جمع البيانات من منصات الأخبار ووسائل التواصل الاجتماعي (بشكل رئيسي تويتر)، وتحليل المشاعر، والتحليل الزمني باستخدام تمثيل السلاسل الزمنية، وتصنيف السلاسل الزمنية باستخدام المسافات الزمنية، والتمثيل الرمزي للمشاعر واكتشاف الأنماط. يتم استخدام مجموعة متنوعة من المهارات مثل التعلم العميق، ومعالجة اللغة الطبيعية، ورؤية الحاسوب، وبرمجة الويب، وتعلم الآلة، وقواعد البيانات لإنجاز هذه المهام.

من خلال مقارنة تغطية الإعلام للحرب الأوكرانية والأزمة السورية، تسعى هذه الدراسة إلى فهم العوامل الأساسية التي تسهم في التعامل المختلف مع اللاجئين والتعامل المسبق على أعمال الحرب. يهدف هذا البحث إلى تقديم نتائج قيمة حول دور وسائل التواصل الاجتماعي ومنصات الأخبار في تشكيل الرأي العام والحوار السياسي، والمساهمة في فهم أعمق للآليات وراء التحيز والمعايير المزدوجة في المشهد الإعلامي الرقمي.

الكلمات الرئيسية: تحيز، تعلم آلي، تعلم عميق، معالجة اللغة الطبيعية، تحليل المشاعر.

Thanks

First and foremost, I would like to express my deepest gratitude to God for granting me the strength, determination, and perseverance to complete this project. Without His guidance and blessings, I would not have been able to overcome the challenges and accomplish what I have today.

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Khemkham Mohamed

Thanks

I am filled with a profound sense of gratitude and joy as I stand on the threshold of completing this monumental chapter in my life. Today, as I present my graduation report, I feel compelled to express my heartfelt appreciation to the individuals who have played an indispensable role in shaping my journey. With unwavering support, they have been my pillars of strength, guiding me through every step with love, belief, and encouragement.

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With profound appreciation, ABDELATIF Abderaouf

List of Acronyms

NLP	Natural Language Processing
SVM	Support Vector Machine
LSTM	Long Short-Term Memory
POS	Part-of-Speech
BOW	Bag Of Words
GPU	Graphics Processing Unit
URL	Uniform Resource Locator
ML	Machine Learning
DL	Deep Learning
AI	Artificial Intelligence
BERT	Bidirectional Encoder Representations from Transformers
GPT	Generative Pre-trained Transformer
QR Code	Quick Response Code