

GOOGLE AS AN INFORMATION GATEKEEPER

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CONTENT OVERVIEW

GOOGLE UNIVERSE

- Google LLC- American multinational technology company
- Monopolist search engine
- Responds to queries with own products
- Keeps users in the "google universe"
- Tries to provide almost all information for every possible query



GATEKEEPING

- Process of controlling information
- Information moves through a gate or filter
- Google is the gate that controls and shapes information
- Selects which information to publish, shape & delete
- Controls the results by using it's own algorithm



LANGUAGE BIAS

- Idea: users favor those who communicate in the same language
- Users try to find information in their mother language
- Bias: Prejudice for a factual situation
- Bias might be towards people who have the same accent or similar slang



CURRENT RESEARCH



Brainstorming process:

- online brainstorming tools (mindmeister mindmap)
- test search queries
- narrowing and reconsidering our topic
- considerations: language bias, algorithmic bias, gender bias, location bias, economic bias

CURRENT RESEARCH





LANGUAGE BIAS IN GOOGLE SCHOLAR AND ITS IMPACT ON ACADEMIC RESEARCH PAPERS

ROVIRA ET AL. 2021



ETHICAL CONCERNS OF GOOGLE'S SEARCH TECHNOLOGY

CANCA. 2021

POLITICAL BIAS IN GOOGLE
CONSIDERING POLARIZING TOPICS
AND POLITICAL PERSPECTIVE

KULSHRESTHA, J., ESLAMI, M., MESSIAS, J. ET AL. 2019



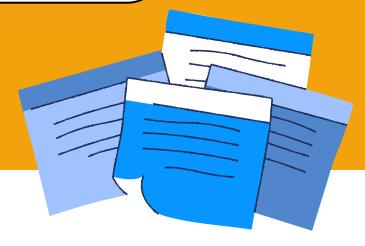
GENDER BIAS IN GOOGLE'S
IMAGE SEARCH RESULTS
FOR OCCUPATIONS

FENG, Y., & SHAH, C. 2022

GOOGLE SCHOLAR: CASE STUDY



"In multilingual searches, is the language in which a document is written a factor in Google Scholar's ranking algorithm?"



GOOGLE SCHOLAR: CASE STUDY

- visibility: academic search engine optimization
- Google Scholar's ranking algorithm
- reverse engineering research

RESULTS



GOOGLE SCHOLAR: CASE STUDY

Application to our approach:

- check relevance ranking of Google Scholar using a grounded theory approach
- advance knowledge on academic search engines by sampling three countries' language queries and recieved citations
- analyze multilingual searches conducted in Google Scholar to showcase dominance of English articles



PRACTICAL INSIGHTS



- Searching for the same prompt 'covid 19 vaccine' on Google Scholar
- Entering the prompt in English as well as in vernacular languages (Bosnian, German, Hindi, Bengali)
- Comparing results received in both languages

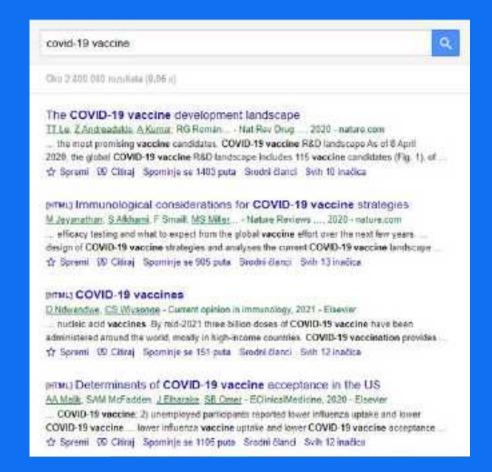
BOSNIA AND HERZEGOVINA



SELECTING THE "PEER
REVIEWED" OPTION DOESN'T
CHANGE THE RESULTS ON
ENGLISH SIGNIFICANTLY, BUT IT
DOES DRASTICALLY CHANGE
THOSE ON SERBO-CROATIAN



THE ARTICLES ARE 61,5 TIMES MORE CITED THAN THOSE ON SERBO-CROATIAN AND CONTAIN NO MULTILINGUAL OPTIONS FOR VIEWERS.



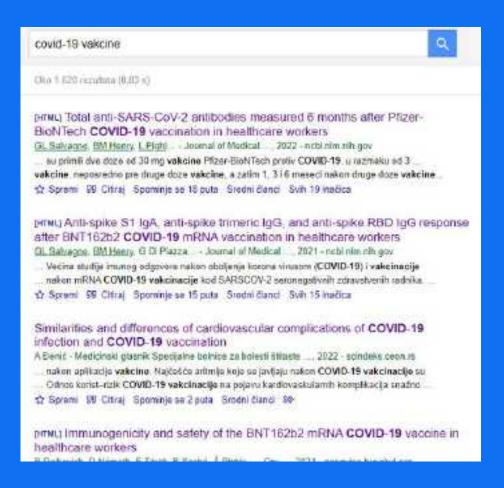
BOSNIA AND HERZEGOVINA



FIRST TWO SOURCES ARE
BILINGUAL BUT ON A FOREIGN
DOMAIN AND COUNT AS MOST
CITED



ARTICLES OFFER BILINGUAL
APPROACH EITHER IN FULL
TEXT OR JUST WITH THE
COMMON THREE: ABSTRACTKEYWORDS-TITLE



INDIA



SEARCH RESULTS ARE WELL-CITED AND RELEVANT TO THE QUERY PROMPT

covid 19 vaccine



About 77:20 000 results (0.06 sec)

The COVID-19 vaccine development landscape

TT18, Z.Andreadakis, A.Kumar, RG Roman - Nat Rev Drug ..., 2029 - nature.com

the most promising vaccine candidates. COVID-19 vaccine R&D landscape As of 8 April 2020, the global COVID-19 vaccine R&D landscape includes 115 vaccine candidates (Fig. 1), of ... ☆ Save. 59 Cite. Cited by 1402. Reliabed articles. All 10 versions

HTML] Immunological considerations for COVID-19 vaccine strategies

M. Jevenathen, S. Aficham, F. Smailt, M.S. Miller — Nature Reviews — 2020 - nature com — efficacy testing and what to expect from the global vaccine effort over the next tew years — design of COVID-19 vaccine strategies and analyses the current COVID-19 vaccine landscape.

☆ Save 90 Cite. Cited by 902. Related articles. All 13 versions.

COVID-19 Vaccine: A comprehensive status report.

SP Kaur, V Gupta - Virus research, 2020 - Elsevier

the outbreak of novel coronavirus enapted and then world— COVID-19 vaccine before September, 2020 as per very optimistic estimates. This is because a successful COVID-19 vaccine ☆ Save 59 Cite. Cried by 850. Related articles. All 12 versions.

[HTML] Determinants of COVID-19 vaccine acceptance in the US

AA Mails, SAM McFadden, J.Elharake, SB Omer - EChrical Medicine, 2020 - Elsevier

COVID-19 vaccine: 2) unemployed participants reported lower influenza uptake and lower COVID-19 vaccine — lower influenza vaccine uptake and lower COVID-19 vaccine acceptance —

\$\frac{1}{2} Save \$\hat{W}\$ Cite. Cited by \$1102. Related articles. All 12 versions



3/8 RESULTS ARE IN ENGLISH



ONLY THE FIRST RESULT IS A RESEARCH PAPER



MOST RESULTS LEAD TO WEBSITES VAGUELY RELATED TO COVID-19

INDIA HINDI

कोविड-19 वैक्सीन About 26 results (0.82 sec) Ter Search for English results only You can specify your search language in Scholar Settings. कोरोना वायरस डीजीज-१९ (कोविड-१९) श्चा. सूर्वकारत - Medicas Organisation Journal (यम यम ओ ..., 2020 - Implournal org संघर्ष ही जीवन है। इस संघर्ष से जो जीत गया प्रकृति उसे ही स्वीकार कराती है, डार्दिन ने भी योग्यतम की उत्तर/वेदिता की बात कहीं थी। इसी ☆ Save III Cite Related articles All 2 versions 80 mooki COVID-19 (कोविड-19 षडांत्र से समाधान तक) BR Chowdhury - 2020 - books google com-पहल है, कियमें 500 से अधिक इंपल्एंका देख रेख विशेषकों का नेतरकी देश भर में आईएलआई **कोबिल 19** सेमियों की देख रेख और विकित्सा कर रहा \$\tilde{x}\$ Save \$\tilde{x}\$ Cite Cited by 1 Related articles. At 2 versions (भाषपु भारत की दशकों पुरानी संधीय व्यवस्था (फेंडरल सिस्टम) को **कोविड-19** महामारी की चनीती N Sappo AK Ghosh - orloning org द्वनिया के अलग-अलग हिस्सी में, सरकार की संघीप प्रणातिया अब तक के सबसे बड़े परीक्षण से गुज़र रही हैं. यह परीक्षण दे कोविड-19 की महामारी 12 Save 70 Cite Related articles All 2 versions 80 ильном कोविड-19 mRNA टीका: यह केसे काम करता है? अञ्चलकारमी - अर्थ वंतर रीडिस्कवरिंग 2021 - azimpinimpunivecsity ndu in कोषिड 19 mRNA टीका : यह केचे काम करता है? - Anuvada Sampada Repository Covid-19 mRNA vaccine How Does II Work pdf ... CDVID-19 mRNA vaccine How Does II Work? ... ☆ Save W Cite All 2 versions M

INDIA BENGALI



ONLY 1 SEARCH RESULT
FOUND, LEADS TO A RIP-OFF
OF THE WIDELY KNOWN
WIKIPEDIA SITE



GERMANY



SEARCH RESULTS ARE WELL-CITED AND RELEVANT TO THE QUERY PROMPT

covid 19 vaccine! Linguistr 2 840 000 Ergelmon (6,64 Sale) The COVID-19 vaccine development landscape [PDF] basis-mettmann.info TT Le. Z Andreadakis. A Kumar. RG Román... - Nat Rev Brug 2020 - nature.com __ this most promising vectine randidates. COVID-19 vaccine R&D landscape As of 3 April 2020, the global COVID-19 vaccine R&D landscape includes 115 vaccine candidates (Fig. 1), of ... dr Speichern IS Zitieren Zitiert von: 1402 Ahriliche Artikuli. Alle 10 Verskonen COVID-19 Vaccine: A comprehensive status report DITMLI nih gov SP Knur, V Gupta - Virus research, 2020 - Ebevier the outbreak of novel consequence engited and then world.... COVID-19 vapoline before September, 2020 as per very optimistic estimates. This is because a successful COVID-19 vaccina ... ☆ Speichern - IC Zitieren - Zitert von 856 - Anniche Anticel - Alle 12 Versionen ритиц Immunological considerations for COVID-19 vaccine strategies proming nature com-M. Jevansthan, S. Alkhansi, F. Smart, MS. Miller... - Nature Reviews ..., 2020 - nature comefficacy testing and what to expect from the global vaccine effort over the next few years. ... design of COVID-19 vaccine shategers and analyses the purrent COVID-19 vaccine landscape ☆ Speichern IVI Zitieren Zitiert von: 902 Ahnliche Artikel Alle 13 Versichen. privity Determinants of COVID-19 vaccine acceptance in the US (HTML) sciencedirect.com AAMaik, SAW NoFedden, J. Ehundes, SB Omer - EChrical Medicina, 2000 - Ebester COVID-19 vaccine; 2) unemployed participants reported lower influenza untake and lower COVID-19 vaccine ... lower influence vaccine uptake and lower COVID-19 vaccine ecceptance & Speichern III Zeemen Zeert von 1102 Abriliche Artikel Alle 12 Versionen Ähnliche Suchanfragen covid 19 vaccine trials moderna covid 19 vaccine covid 19 varcine exford covid 19 vaccine candidates covid 19 vaccine landscape covid 19 vaccine ofizer covid 19 vaccine development covid 19 veccine hesitancy fandscape nature

GERMANY



EVEN THOUGH THE FIRST
SEARCH RESULT IS IN
ENGLISH, THE INFORMATION
PROVIDED IS IN GERMAN



2-4 SEARCH RESULTS ARE FROM RKI - TRUSTED SCIENTIFIC SOURCE

covid 19 implung	
Cond to impuly	
Angeliër 15.700 Ergebrase (0,48 Set.)	
PRINT COVID-19: epidemiology and mutations: An update	(HTML) springer.com
CJ Hemmer, M. Löbermann, EC Reisinger - Der Radiologe, 2021 - Springer	
Die Winteemteit der in Deutschland verfügtieren Impfungen gegen SARS-CoV-2 scheint durch doss Mutationen jedoch zur geringfligig beeintrilichtigt zu sein. Bei der Bata-Variante (B	
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Welche Impfquote ist notwendig, um COVID-19 zu kontrollieren?	groej rki.de
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Impfistoffe zum Schutz vor COVID19 zu entwickeln. Seit Ende 2020 tzw. Anfang 2021 stehen in Speichern IV Ziteren Zitert von 19 Afreiche Artikel 30	
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CoV-2/COVID-19-Pandemie einschließlich Empfehlungen Zur COVID-19- Impfung	
C.Spesser, P.Aries, J.Breun, G.Burmester Zerbschrift für, 2021 - Springer Grundsätzlich gilt zwar eine Empfortung, elektive Impfungen nicht währsnd eines	
Schubes zu verebreichen, eb man eine Impfung gegen COVID-19 von der aktuellen	
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CONCLUSION

- Search results for four languages were compared with English
- Relevant documents are displayed in English
- Hardly any differences on comparing German-English results
- Many irrelevant results for both Indian languages
- The algorithm is strongly focused on English papers only

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