The Australian **Search Experience** Project

ADM
+S

Evaluating the potential impacts of search engine personalisation on people's search results and determining whether search engines have the potential to create 'filter bubbles' or to promote misinformation and disinformation, the Australian Search Experience Project brings together researchers from Australian universities within the ADM+S Centre to work with international partner organisation AlgorithmWatch to determine the impact of personalisation on search engine recommendations.

www.admscentre.org.au/searchexperience

The Problem

There is a lot of speculation about the impact that search engines have on the information we encounter. But we know very little about how they order and display information.

Search engines are so central to our daily lives that we need a way to independently assess the information they recommend. We want to achieve this with a citizen science project.

Search engine personalisation may be influencing individuals' search results, and thereby shape what they know of the world. This may affect their personal decisions, and our collective decisions as a society – from how we spend our money or who we vote for to our attitudes on critical issues such as the safety of COVID-19 vaccines.

Research Impact

The Australian Search Experience Project studies the personalisation of search results for critical news and information, across key platforms from Google to YouTube. We will work with policymakers, educators, and the platforms themselves to mitigate any negative effects of such shaping.

"65% of people see online search as the most trusted source of information about people and companies. That's a higher level of trust than any other online or offline source." (Forbes, 2014)

"In **2020 Google processed over 3.5 billion searches per day.**" (Internet Live Stats, 2020)

Modern digital news and media platforms deploy automated decision-making systems intensively with **positive as well as sometimes problematic results.**

RESEARCH IMPACT

This project provides an independent, rigorous assessment of how search and social platforms shape information flows and public discourse for Australian users. This research will assess the extent to which search results are personalised, by various leading search engines and their algorithms, based on the profiles established by those search engines for their different users. It will compile and analyse the search recommendations encountered by a wide range of genuine users across prominent digital media platforms, for a variety of generic and specific topics, and over a period of time. This research extends on and advances earlier experimental work by our partner AlgorithmWatch, using 'data donation' methods via browser plugins that involve the public in the research.

We take data privacy very seriously

> We do not access any personal data
> We do not access personal search history
> None of the information provided can be traced back to the person

This project has been reviewed and approved by the QUT Human Research Ethics Committee approval number 2021000293.

CALL TO ACTION

To understand the potential social impacts of search engine personalisation, we need more than 3,000 participants to join the project. Volunteers are invited to visit our webpage for further information about the project, and to download the browser plugin.

www.admscentre.org.au/searchexperience

As part of the installation process, the plugin asks volunteers to provide some basic demographic data (but nothing that could be used to re-identify individual users). The plugin periodically runs searches on a number of leading search engines (Google Search, Google News, Google Video, and YouTube), using keywords relating to generic topics and current events, and reports the results to our project. All of this happens in the background, with minimal disruption to participating users. No personal information is gathered. With the help of a large enough cohort of volunteers, this approach enables us to gain valuable and otherwise unavailable insights into how search engines are shaping their search results to suit Australian users' interests.

Project enquiries can be emailed to:
datadonation@admscentre.org.au

BACKGROUND

The ARC Centre of Excellence for Automated Decision-Making & Society

The ARC Centre of Excellence for Automated Decision-Making and Society (ADM+S) is a new, cross-disciplinary, national research centre, which **aims to create the knowledge and strategies necessary for responsible, ethical, and inclusive automated decision-making**. Funded by the Australian Research Council from 2020 to 2026, ADM+S is hosted at RMIT in Melbourne, Australia, with nodes located at eight other Australian universities, and partners around the world. The Centre brings together leading researchers in the humanities, social and technological sciences in an international industry, research and civil society network.

https://www.admscentre.org.au/

OUR RESEARCHERS

Chief Investigators ━━━━━━━━

Professor Axel Bruns is a Professor in the Digital Media Research Centre (DMRC) at the Queensland University of Technology (QUT). He is a recognised leader in the fields of internet studies, media and communication studies, and journalism studies. He has expertise in analysis of the dynamics of online publics that engage with journalistic content, and is one of Australia's most prominent researchers on the transition to large-scale and innovative digital humanities research.
https://www.admscentre.org.au/axel-bruns/

Professor Jean Burgess is a Professor of Digital Media in the DMRC at QUT. She is an international leader in the emerging field of critical platform studies. She has a strong theoretical understanding of the role of data and platforms in shaping cultural expression and public communication; and specialist expertise in advanced digital methods that combine qualitative social research methods with critical platform studies and data analytics.
https://www.admscentre.org.au/jean-burgess/

Professor Nic Suzor is a Professor at the Law School at QUT. He is an internationally recognised expert in the regulation and governance of digital technologies. Suzor's conceptual work on 'digital constitutionalism' provides a groundbreaking theoretical lens through which to understand how public interest values are impacted and can be protected in the context of rapid technological change.
https://www.admscentre.org.au/nicolas-suzor/

Professor Mark Andrejevic is a Professor of Media Studies at Monash University. His research covers the social, political, and cultural impact of digital media, with a focus on surveillance and popular culture. Mark has done pioneering work on the social, cultural and political consequences of automated data collection, processing and decision making.
https://www.admscentre.org.au/mark-andrejevic/

Professor Kimberlee Weatherall is a Professor of Law at the University of Sydney. Her current research focuses on the law relating to the collection, ownership, use and governance of data about and related to people, including privacy law, with the goal of ensuring that data collection, use and linkage, and data and predictive analytics are developed in a way that is fair, transparent, accountable, and beneficial to people and society.
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Associate Investigators ━━━━━━━━

James Meese (RMIT)   Timothy Graham (QUT)
Damiano Spina (RMIT)   Ariadna Matamoros-Fernández (QUT)
Daniel Angus (QUT)   Falk Scholer (RMIT)

INDUSTRY PARTNER

AlgorithmWatch is a non-profit research and advocacy organisation that is committed to watch, unpack and analyse automated decision-making (ADM) systems and their impact on society.

ALGORITHM WATCH

What did you see? A study to measure personalisation in Google's search engine.
EPJ Data Science| 2019

In 2017, more than 4,000 people contributed their search results for keywords connected to the German federal election campaign to the AlgorithmWatch project. Their study found that the impact of search result personalisation was small. It also found that the the presence of a 'filter bubble' was negligible. This project provided a proof of concept that enabled society to permanently monitor a search engine's degree of personalisation for any desired search terms.
https://epjdatascience.springeropen.com/articles/10.1140/epjds/s13688-019-0217-5

RELATED MEDIA

How Do Search Engines Decide What We See Online?
ADM+S Podcast | 30 June 2021
Featuring: Jean Burgess, Verity Trott, Matthias Spielkamp, and Abdul Obeid
https://anchor.fm/adms-centre/episodes/How-Do-Search-Engines-Decide-What-We-See-Online-e13m2m4/a-a617g3r

Investigate the root cause of polarisation – don't just blame social media filter bubbles.
The Sydney Morning Herald | 29 July 2019
Featuring: Axel Bruns
https://www.smh.com.au/business/companies/investigate-the-root-cause-of-filter-bub-bles-not-social-media-algorthims-20190725-p52alk.html

Book: Automated Media
Released 2020
Author: Mark Andrejevic
https://www.amazon.com.au/Automated-Media-Mark-Andrejevic/dp/0367196832

Book: Are Filter Bubbles Real?
Released 2019
Author: Professor Axel Bruns
https://www.amazon.com/Filter-Bubbles-Real-Axel-Bruns/dp/1509536442

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