

Christchurch Call Initiative on Algorithmic Outcomes (CCIAO)

CCIAO PHASE 1 CLOSE OUT REPORT

November 2025

Contents

Acknowledgements	3
Executive Remarks	4
About CCIAO	5
Phase 1 Proved that Reviewing Proprietary Algorithms is Possible	7
CCIAO At a Glance	9
CCIAO Phase 1 Financial Statement	10
Next Steps	11

Acknowledgements

The Christchurch Call extends its thanks to the following people, organisations and governments for their support, which enabled the delivery of Christchurch Call Initiative on Algorithmic Outcomes (CCIAO), Phase 1:

The Governments of New Zealand, France, and the United States of America.

OpenMined, Microsoft, Dailymotion, the Center for Security and Emerging Technology at Georgetown University, and Twitter (now known as X).

The Christchurch Call would also like to pay special mention and thanks to the researchers and contributors to this report, without whom this project would not have been possible:

Authors of the Phase 1 Report: Jiahao Chen, Jack Bandy, Ruchi Bhatia, and Dave Buckley.

Contributors: Jon Adams, Tong Zhou, Adrian Rivera, Alex Murchison, Ryan Rogers, Rahul Tandra, Siyao Sun, Sébastien Le Roux, Thomas Schmitt, Brice de la Brière, Cyrille Brun, Andrew Trask, Irina Bejan, Lacey Strahm, Stephen Gabriel, Zarreen Reza, Ishan Mishra, Osam Kyemenu-Sarash, Laura Ayre, and others in the talented engineering team.

Executive Remarks

New Zealand Prime Minister Jacinda Ardern and French President Emmanuel Macron launched the Christchurch Call to Action in May 2019, after a livestreamed terrorist attack, amplified globally on social networks by algorithmic recommender systems. From the outset, Call supporters recognised that understanding how algorithms influence the spread of terrorist and violent extremist content was critical to addressing online radicalisation. While research pointed to the risks of algorithmic amplification, safe methods to study and mitigate those risks were still needed.

To advance this work, the Christchurch Call launched an Initiative on Algorithmic Outcomes (CCIAO) in September 2022. Phase 1 demonstrated that proprietary algorithms can be studied securely, without compromising user privacy or commercial confidentiality. This achievement matters - for the Christchurch Call Community and its mission to eliminate terrorist and violent extremist content online, and for researchers, policymakers, and the public seeking greater transparency into how algorithms rank, amplify, and monetise content. The methods proven in Phase 1 can be applied to broader online safety challenges.

Delivering this proof of concept required significant collaboration. This Phase 1 close-out report not only recognises the financial support and technical expertise contributed by partners, but also documents the knowledge gained and shared. Together, these contributions have advanced understanding of how proprietary algorithms can be studied securely, creating a foundation for future research and practical applications.

We thank the teams at OpenMined, Microsoft, Dailymotion, and Twitter (now X) for their technical partnership; the governments of France, New Zealand, and the United States, along with the Center for Security and Emerging Technology at Georgetown University, for their support; and the researchers, Christchurch Call Foundation team, and wider Christchurch Call Community for their expertise and guidance.

Ngā mihi nui ki a koutou.



Paul Ash

Chief Executive

Christchurch Call Foundation

About CCIAO

On March 15, 2019, a terrorist attacked two mosques in Christchurch, New Zealand, killing 51 people and injuring 50. The attack was live streamed on Facebook for 17 minutes and subsequently spread across multiple platforms. The video quickly appeared in people's feeds around the world because algorithms did exactly what they were designed to do – amplify content receiving high engagement signals and surface material rapidly gaining traction – and because adversarial actors targeted this feature. The result was millions of people becoming unwilling witnesses to an act of terrorism, while victims and their families endured repeated trauma as the footage resurfaced across social networks and the internet.

In response, New Zealand's Prime Minister Jacinda Ardern and French President Emmanuel Macron brought together Heads of State and Government and leaders from the technology sector to adopt the [Christchurch Call To Action](#). The goal was to eliminate terrorist and violent extremist content (TVEC) online. Today, 55 governments, the European Commission, and 19 online service providers support the Call, alongside a growing number of partner organisations. A strong civil society and academic network informs and guides this work, via the Christchurch Call Advisory Network. Together, these participants form the Christchurch Call Community.

In September 2022, at the Christchurch Call Leadership Summit, a consortium of stakeholders announced the [Christchurch Call Initiative on Algorithmic Outcomes \(CCIAO\)](#). The purpose of the Initiative is to invest in accelerated technology development to create freely available tools for independent, proprietarily secure and privacy-preserving study of algorithmic outcomes, drawing on specific commitments in the Christchurch Call.

The Problem	The Solution
Research is limited → Access to proprietary algorithms is hard to obtain, often restricted to single platforms or small datasets, leaving major gaps in understanding.	Research enabled → Accredited researchers can study how algorithms interact with terrorist and violent extremist content and investigate radicalizing influences.
High cost → Current approaches are expensive and administratively complex.	Lower costs → A trusted, shared system reduces the cost and complexity of access, enabling large-scale studies across platforms.

Lack of transparency → Platforms can be reluctant to open their systems to scrutiny because they don't trust how data will be used or how reporting will be shared.

Transparency → Ethics and governance frameworks give platforms confidence their data is handled responsibly, supporting open, trusted research. We will open source the underlying code for this work on **GitHub**.

Security and privacy concerns → Companies are wary of exposing user data or intellectual property.

Security and Privacy → Protects user privacy, data security, and intellectual property for both users and companies.

Phase 1 Proved that Reviewing Proprietary Algorithms is Possible

Phase 1 of CCIAO successfully achieved proof of concept in 2023/24, proving that third parties can review proprietary algorithms while protecting the security and privacy of commercially sensitive and personal information.

Online radicalisation to real-world violence starts with content. Algorithms play a key role in this – amplifying what people see and potentially pushing individuals deeper into more extreme and harmful material. However, independent research to understand algorithms and develop solutions is costly, complex, and access is usually restricted to single platforms. This makes it difficult collectively make changes, develop effective interventions, or be sure that problems have well-matched solutions.

CCIAO addresses the root of this problem: how algorithms shape online journeys and can amplify terrorist and violent extremist content. CCIAO solves for this by creating a secure, privacy-preserving way to study algorithmic impacts across platforms, while protecting data, user privacy, and intellectual property.

“Algorithmic reviews are essential for helping to address unwanted AI biases, stopping the amplification of terrorist and violent extremist content, and keeping children safe online.”

Dame Jacinda Ardern, Patron, Christchurch Call

CCIAO’s Phase 1 project team, comprised of four independent researchers, successfully performed reviews of recommender systems at LinkedIn and Dailymotion. Using the combined application of remote data access and differential privacy, alongside governance processes built into PySyft, they achieved high-confidence results in reviewing real, anonymised, production data. This was achieved without providing third-parties with direct platform access, mitigating the most pressing concerns about algorithmic study, privacy and security.

The *Christchurch Call AI Transparency in Practice Report* (October 2024) showcased the first major milestone in this multi-phase initiative — proving we can provide both the assurance and the technical infrastructure required to unlock research into one of today’s most pressing challenges.

CCIAO’s long-term goal is to deliver this tool via an accredited researcher network, to enable safe ‘inside the black box’ research into how algorithms influence radicalisation towards violent extremism, and support development of effective interventions as users engage with terrorist and violent extremist content online.

CCIAO At a Glance

Phase 1 (2023/24)	Proved it is possible to study algorithms in a privacy-enhancing way. This initial phase successfully trialled a minimum viable product and tested it on real data sets, with results published in 2024. Based on this, the technical pathway forward is clear from a design perspective.	COMPLETED
Phase 2 (2025)	Establishing governance, ethics arrangements, and data access The project is underscored by a Delphi Study which is gathering insights and perspectives from the Call Community and other interested stakeholders on the most effective ways to design and implement governance arrangements.	UNDERWAY
Phase 3 (from 2026)	Scales the tool for accredited researchers and real-world deployment. Technical development and multistakeholder work to deliver the CCIAO tool and access via an accredited researcher network. This phase will require further funding.	NEXT STEP

CCIAO Phase 1 Financial Statement

CCIAO Phase 1 was funded by four organisations:

Supporter	Received (USD)
Georgetown University Center for Security and Emerging Technology	\$798,600
Microsoft	\$500,000
New Zealand Government	\$500,000
Twitter (now X)	\$498,860
TOTAL	\$2,297,460

Next Steps

CCIAO Phase 2, currently underway, is midway through a Delphi Study designed to bring together perspectives from stakeholders and the wider Call Community, with the aim of building consensus around governance and ethics arrangements. These outcomes will provide the foundation for Phase 3, where the focus will shift toward operationalising and scaling the work. In parallel, work is advancing on securing data access, ensuring researchers can engage with diverse and relevant datasets under robust safeguards.

CCIAO Phase 3 will focus on scaling the tool for accredited researchers and real-world deployment. This is a technical and system-level build that will require specialist engineering skills and infrastructure, and strong ethics and governance arrangements. This work is complex and resource-intensive; to be effective and trusted, it needs to meet high standards of security, privacy, governance and functionality.

CCIAO's long-term goal is to deliver this tool via an accredited researcher network, to enable safe 'inside the black box' research into how algorithms influence radicalisation towards violent extremism and develop effective interventions to redirect users from terrorist and violent extremist content.

Christchurch Call Initiative on Algorithmic Outcomes

cciao@christchurchcall.org

christchurchcall.org

