

ANNUAL REPORT

2023

A₁ FORENSICS

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Welcome from the Director

2023 has been a flourishing year for AI Forensics!

One of the biggest highlights of the year was **the transition of Tracking Exposed into AI Forensics**. The group had been at the forefront of analyzing algorithmic power for seven years, and played a vital role in shedding light on the impacts of algorithms.

In this new chapter, our strategy is to focus on auditing algorithms, with the continued goal of investigating how they affect people and communities. This is both our most unique expertise and where we see the biggest opportunity to support the ecosystem.

We **sharpened our evidence collection infrastructure** to be more robust and adaptable, allowing us to gather data at scale to scrutinize the search and recommendation systems of TikTok, YouTube, Amazon, or chatbots such as Microsoft Copilot. Internally, we made significant operational improvements, to support the growth of our team which nearly doubled in size.

Our data-driven approach combined with our team's socio-technical skills, lead us to receive ever more solicitations from partners and regulators, on both sides of the Atlantic. This **growing recognition as an expert of reference on platform accountability** is rewarding and comforts our strategic direction.

Throughout the year, we cultivated new collaborations, participated in key policy and advocacy meetings, and spearheaded impactful initiatives.

But it has not all been easy either! A sudden model shift of our previously largest funder put a critical strain in our funding plan. However, the support and encouragement we received from funders and peers helped us navigate this challenge with the confidence that it was contextual rather than structural. We are particularly grateful to the **Open Society Foundation, Luminate and Limelight Foundation**, who swiftly stepped up to fill that gap and allowed us to continue our

work without disruption. As we've stepped into 2024, our foundations have significantly strengthened across all fronts: we have diversified our funding sources, built a stronger cohesive team, and conceptualized a clear research roadmap.

This year, the enforcement of the **Digital Services Act and the upcoming election cycles** will be a major focus for us. The rise in popularity of generative AI, and its integration within the platforms we scrutinize, is another growing axis in our work, in direct synergy with our tools and methodologies we develop to study recommender system.

Those major regulatory and technological developments continue to make algorithmic auditing ever more relevant, and provide us with a constant stream of new opportunities to impact the development of AI systems in a way that is aligned with the interest of people and democratic societies.

What an exciting time to work in our field!



Marc Faddoul



Our Strategy

Our Mission

AI Forensics is a European non-profit which investigates influential and opaque algorithms.

We hold major technology platforms accountable by conducting **independent** and **high-profile technical investigations** to uncover and expose the harms caused by their algorithms.

Our vision is to apply innovative methods to uncover violations and provide information to help shape and enforce responsible regulatory policies. We work towards a world where algorithms are **accountable, adjustable and avoidable**.

In other words, we are the digital detectives who shine a light on hidden algorithmic injustices, and work to bring accountability and transparency to the tech industry. Our means of actions are:

Collect Evidence

Develop tools for algorithmic auditing

Our audits are always data-driven, but the data we need is typically not made available by the platforms. Our tools allow us to mimic user behaviors, and collect behavioral data on the algorithm, using methods such as sock-puppeting, scraping or user data donation. These adversarial approaches allow us to be fully independent from the platforms, and guarantee the integrity of our data.

Analyse & Interpret

Conduct Investigations

We design our methodologies and make sense of the data collected through the socio-technical expertise of our transdisciplinary team (e.g. computer & data science, social psychology, tech policy & ethics, media studies) and in partnership with other civil society organizations with complementary expertise.

Testify

Expose violations and inform regulation

We turn our investigations into insights and actionable recommendations to inform and support policy, advocacy and regulation. We mobilize our large network of journalists and generate high-profile press in order to raise awareness. We regularly provide expertise through congressional testimonies, academic conferences, and other public forums.

Collaborating and Empowering the Algorithmic Auditing Ecosystem

We release our auditing tools as free-software, to lower the technical barrier-to-entry to the algorithmic auditing space, and empower a broader, more diverse set of actors to scrutinise algorithms. We also conduct trainings and workshops on algorithmic auditing.

Beyond that, we make our expertise available to partners who fight for better tech accountability with other approaches, such as policy & advocacy, strategic litigation and investigative journalism.

If you would like to access our Strategy Document for the years 2023-2025, please don't hesitate to contact us at info@aiforensics.org.



Meet the team

Over the past year, **our team has expanded significantly**, celebrating its multidisciplinary, socio-technical, and multilingual ethos. This diverse blend of expertise has propelled us forward, enabling us to elevate the impact of our organization on all fronts.



DIRECTOR

MARC FADDOUL

Marc, co-founder and director of AI Forensics, is an engineer and computer scientist. He studied socio-technical systems at UC Berkeley where he conducted research with F...



STRATEGY & ADVISOR

CLAUDIO AGOSTI

Claudio founded Tracking Exposed in 2016, pioneering adversarial algorithmic auditing in non-profits and academia. In 2023, when Tracking Exposed became AI Forensics and Reversing...



HEAD OF RESEARCH

SALVATORE ROMANO

Salvatore leads research at AI Forensics, merging social psychology with Computational Social Science. Specializing in media studies and platform accountability, he innovate...



RESEARCHER

MIAZIA SCHUELER

Miazia, a researcher at AI Forensics, focuses on digital methods and algorithmic injustices. Using qualitative and quantitative audits, she examines racial and gendered discriminati...



POLICY & COMMUNICATIONS

RAZIYE BUSE ÇETIN

Buse leads policy and communications at AI Forensics. Buse has expertise in AI ethics, policy and governance and previously worked with sev...



SOFTWARE DEVELOPMENT

ALVARO DE FRUTOS

Alvaro is a developer in charge of the creation, coding and usability of the tools produced by AI Forensics. With his love for design and pixel perfect mania, he's always trying t...



RESEARCHER

NATALIE KERBY

Natalie, a researcher at AI Forensics, specializes in investigating major media platforms and generative AI. Her expertise includes platform and infrastructure studies, with a focus on di...



AI RESEARCHER

SONIA TABTI

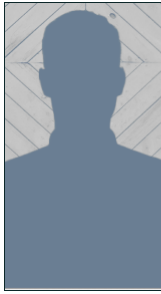
Sonia has a strong background in applied Mathematics, artificial intelligence and computer vision. She has always been committed to take extreme care of potential imbalanc...



HEAD OF FUNDRAISING & ADVOCACY

KATYA VIADZIORCHYK

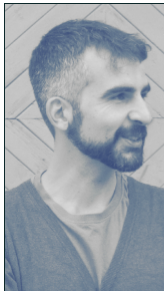
Katya, a political scientist with a MA Degree in Human Rights, emphasizes inclusive participation for impactful changemaking. She focuses on communit...



RESEARCHER

PAUL BOUCHAUD

Paul is a researcher at AI Forensics auditing online platforms' algorithms while investigating their impact on social dynamics within their PhD at the Complex Systems Institute of Paris...



RESEARCHER

RICCARDO ANGIUS

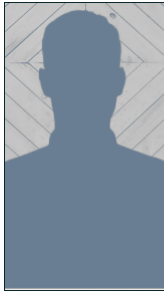
Riccardo researches uncharted bridges between computability theory, social reproduction and cognitive science, leveraging a decade-long experience in machine learning, comput...



SOFTWARE DEVELOPMENT

ULRIK A. HALMØY

Ulrik works with the development of data collection and research infrastructure at AI Forensics. Ulrik is interested in the social, political and cultural aspects of our con...



INFRASTRUCTURE

ANDREA T

Andrea is in charge of the infrastructure & tech side. He designed and now manages the infrastructure at AI Forensics, including where this website is running and the data colle...

Our team consists of experts from various fields, including computer science, law, ethics, sociology, psychology and communication. We believe that a pluridisciplinary approach is essential in understanding the ethical and social implications of AI technologies. In addition to our

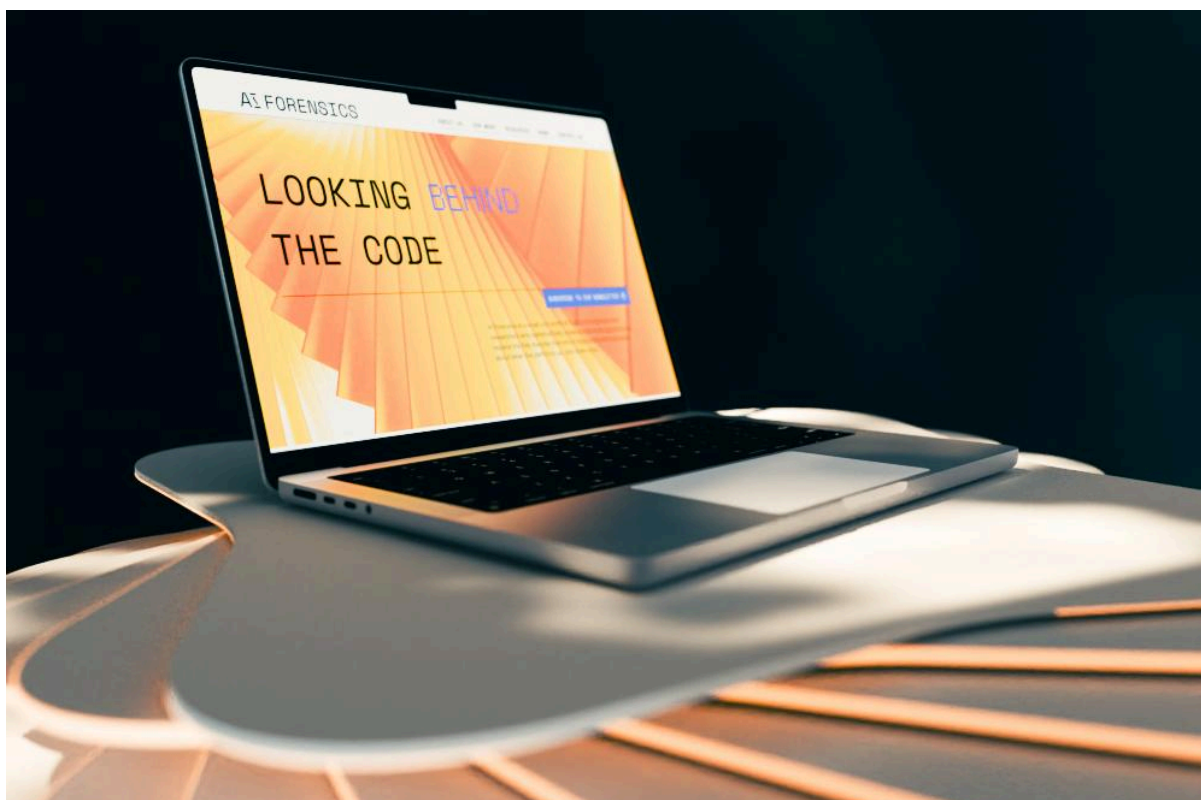
core team, we work with talented individuals and long term collaborators for specific areas of domain expertise including when we investigate platform integrity across different geographies and languages.



2023 - Highlights

AI Forensics Rebranding

In 2023, our organization saw significant growth. We shifted from Tracking Exposed to AI Forensics, **prompting a rebrand to align with the new identity**. This involved creating a new look and feel, launching a new website, and starting a revamped



communication plan for our social media and a brand-new newsletter.

[Subscribe to our newsletter!](#)

AI Forensics Media Coverage

Our work has garnered **significant interest from media outlets** across Europe and internationally, underscoring the relevance and impact of our initiatives on a global scale. Notable publications such as [Wired](#) and [The Washington Post](#) have featured our projects, highlighting our contributions to pressing issues. This visibility

underlines our commitment to driving conversations and shaping narratives on critical topics at the intersection of technology, society, and policy.



The screenshot shows the top of a Washington Post article. The masthead includes the logo 'The Washington Post' with the tagline 'Democracy Dies in Darkness', a search icon, and buttons for 'Subscribe' and 'Sign in'. Below the masthead is a navigation bar with the category 'TECH' and sub-categories: 'Help Desk', 'Artificial Intelligence', 'Internet Culture', 'Space', and 'Tech Policy'. The main headline reads 'AI chatbot got election info wrong 30 percent of time, European study finds'. The sub-headline states: 'Microsoft's Bing search bot gave wrong answers when asked basic questions about elections in Germany and Switzerland, often misquoting its sources'. The author is identified as 'By Will Oremus' with a small profile picture. The publication date is 'December 15, 2023 at 3:00 a.m. EST'.

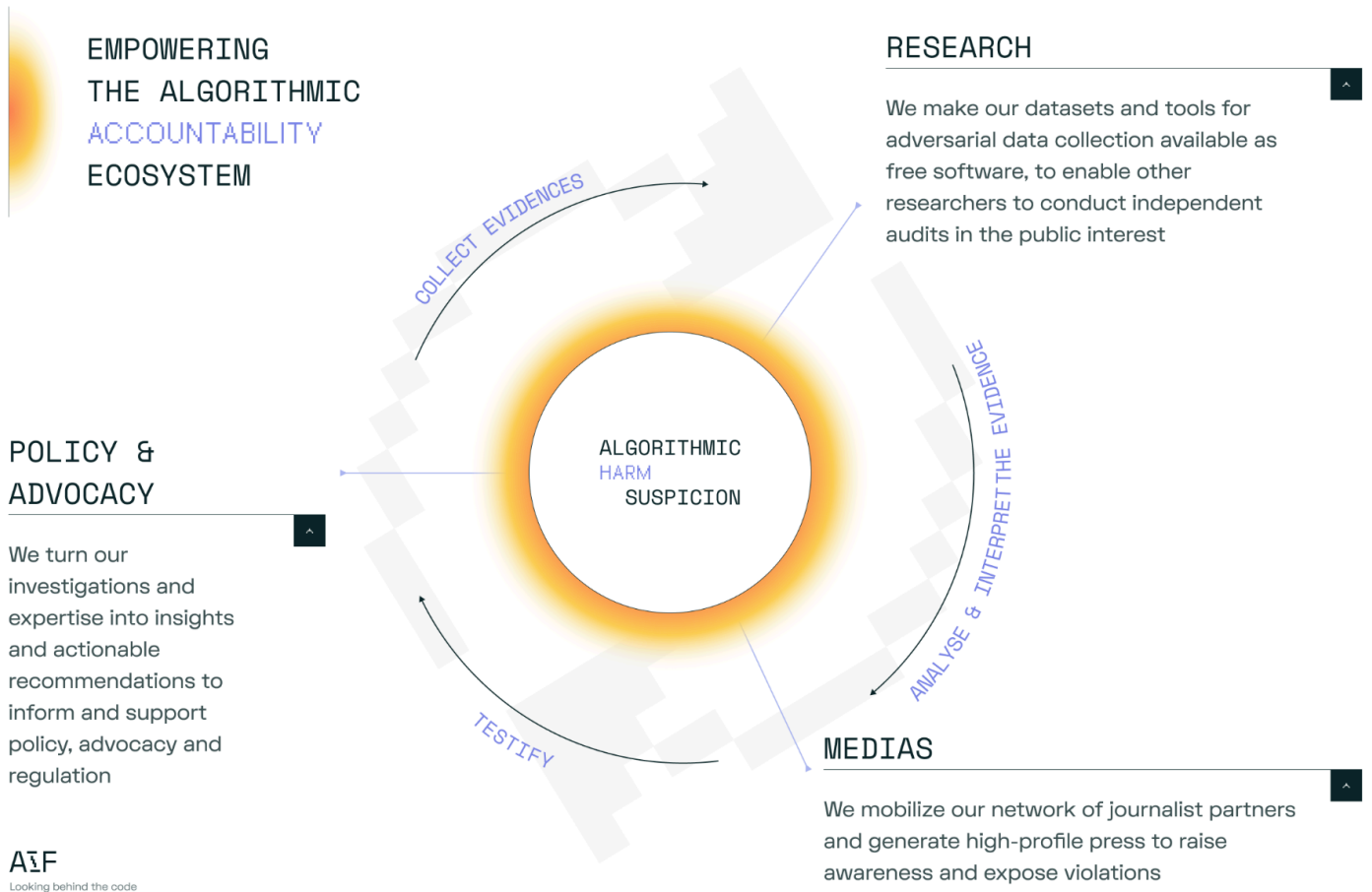
Moreover, our team members are frequently invited to share their insights and expertise at **prestigious public forums**. For instance, our director, Marc Faddoul, delivered a keynote address at the [Nordic Media Days](#), where he highlighted key challenges and opportunities in our field.



Photo by Thor Brdreskift

Our collaborative approach

AI Forensics has an inherently collaborative approach, we work in synergy with other actors in the ecosystem. Last year we **increased the amount of partnerships and collaborations** with other organisations such as Algorithm Watch, Check First, SNV, Amnesty and others.



2023 - Achievements

Evidence Collection Infrastructure

In 2023, we have **substantially improved the robustness and versatility of our evidence collection infrastructure**, through which we automate puppet accounts and monitor the algorithm's behavior in response. Our researchers determine and navigate the experimental conditions and the execution schedule, as well as specify parameters such as the IP location.

We also occasionally rely on official data access mechanisms, such as those mandated by the Digital Service Act, but those do not provide the same affordances. In particular, official APIs do not provide data points which would enable scrutinizing recommendation dynamics. Moreover, the integrity of the data is less guaranteed through official APIs than when it is collected directly from the user interface. For these reasons, **our independent infrastructure and adversarial data collection approach remains essential for the future**.

As such, we have continued to invest most of our technical resources in its development. A major upgrade has been to **develop native support for mobile devices on our infrastructure**, as opposed to relying solely on web applications. This is crucial given that most of the platforms we analyze prioritize mobile usage, often exhibiting distinct behaviors and features compared to browser versions.

In addition to TikTok and YouTube, we also **added support for Microsoft Copilot to our infrastructure**. In parallel, we also developed specific scrapers to collect recommendations from Amazon, Pornhub, and XVideos.

Last, we made special efforts to improve our habit of continuous documentation, to ease the reuse of our tools by the rest of the audit community.

Generative AI in elections

In a [joint investigation](#) with **Algorithm Watch**, AI Forensics tested the reliability of Microsoft's Copilot, formerly known as Bing Chat, in providing quality information during elections. Copilot is a large language model (LLM) chatbot—similar to Chat GPT—that formulates answers to prompts by collecting search results and summarizing findings with sources for the user. The research showed that **one third of Bing Chat's answers to election-related questions contained factual errors.**

Our research is the first adversarial audit of a search engine powered by an LLM. Our pioneering methodology used automated browsers which emulated user behavior from multiple locations in Switzerland and Germany. Such an approach allowed us to collect data and compare answers across time, bypassing any form of personalization from Microsoft Copilot. We used parsing techniques to record the main content of the answers, and we analyzed them jointly with the AlgorithmWatch team and a network of context experts.

IMPACT

This investigation has drawn significant attention from European policymakers, sparking policy meetings and informing targeted feedback on regulatory initiatives like the Digital Service Act. Notably, the report has been [cited](#) in the Draft Guidelines of the European Commission for the protection of Electoral Processes. Additionally, it has garnered considerable media coverage, with mentions in prominent publications such as [The Washington Post](#) and [Wired](#).



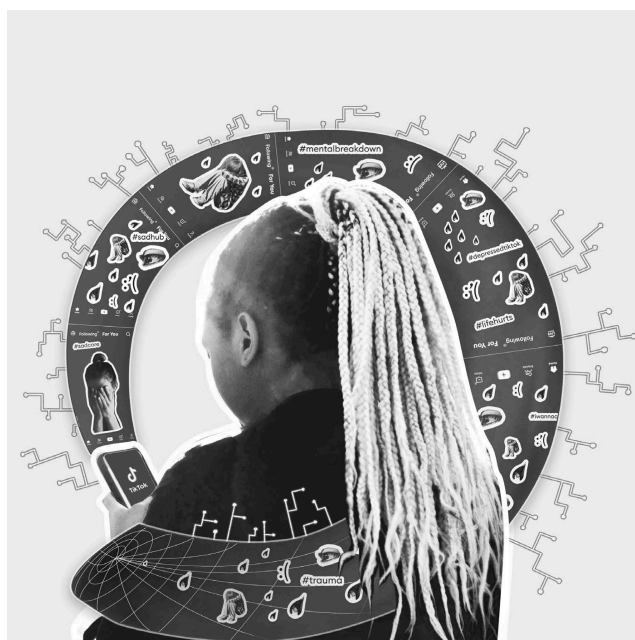
TikTok Depression

In an era where social media is intertwined with daily life, especially among youth, our study, led by **Amnesty International**, sought to understand the profound impact of TikTok’s algorithm on mental health. This research was imperative to uncover how personalized content feeds, particularly TikTok’s For You Page (FYP) page, may contribute to self-harm and suicidal ideation among young users in Philippines, US and Kenya.

Our findings reveal a stark and troubling reality: TikTok’s algorithms could potentially lead young users down dangerous paths, exposing them to content that glorifies self-harm and suicidal thoughts. This study has ignited a vital conversation about the ethical responsibilities of social media platforms and their impact on youth mental health.

IMPACT

Amnesty International has a dedicated page about the overall “Driven into Darkness” project [here](#). Additionally, there’s an open letter to the European Parliament addressing the addictive design of online services, including social media platforms, which can be accessed [here](#). For those interested in actively participating in the movement to make platforms like TikTok safer, Amnesty International also provides a platform to sign a petition, available [here](#). For further insights into the investigation, explore media coverage by [Wired](#) and [Mozilla](#).



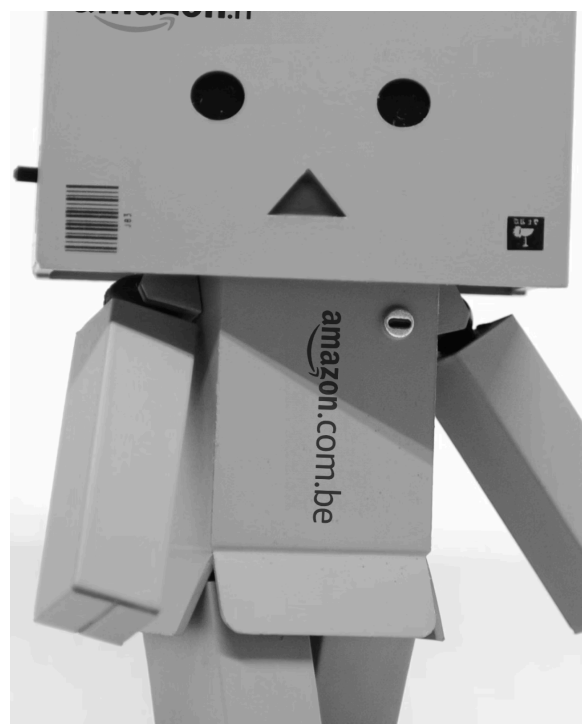
Amazon Library

In light of its 181 million users in the European Union in 2023, Amazon, a leading force in e-commerce, falls under the Very Large Online Platform (VLOP) designation per the Digital Services Act. The European Commission, exercising its regulatory role, has requested information from Amazon regarding compliance with risk assessment and mitigation obligations for online consumer protection.

Through a collaboration with CheckFirst, we examined the search results on Amazon's Belgian and French bookstores, which coupled to a landscape of recommendations large of 60 thousands books, reveals systemic risks, including problematic search results, confinement of users into book bubbles, and the recommendations of sexually explicit content. This comprehensive analysis contributes to the ongoing discourse on the responsibilities of digital platforms in information dissemination and the challenges posed by algorithmic curation. It underscores the imperative of responsible platform management to preserve public discourse, uphold fundamental rights, and ensure societal well-being.

IMPACT

The report has captured the interest of both European and national decision-makers, as evidenced by its presentation to key stakeholders including the EU Commission DG-CNECT team and ARCOM (The Regulatory Authority for Audiovisual and Digital Communication, an independent administrative agency in France). For further insights into the investigation, explore media coverage by [Le Monde](#) and [Le Soir](#).



TikTok Global Observatory (TKGO)

We released our **newly developed tool, the TikTok Global Observatory (TKGO)** that enables cross-national comparison of TikTok's "show window", the videos the platform serves to non-logged-in or so-called guest users. The tool allows one to compare TikTok's algorithmically curated For You Page (FYP) recommendations across almost 200 countries & territories for non-logged-in users. We are developing this software to understand how TikTok sees the world and maps new digital boundaries and proximities through its recommendation system. As a global social media company, TikTok must operate within and adapt to different cultures and geopolitics, even when it presents itself as a neutral or apolitical platform. With TKGO, we enable the exploration of various globally emerging patterns, trends, and concerns between and within geographically dispersed countries.

The screenshot displays the TikTok Global Observatory (TKGO) interface. At the top left, it says 'AIF FORENSICS'. The main title is 'TIKTOK GLOBAL OBSERVATORY'. On the right, there is a link 'ABOUT THE TOOL'. Below the title, there is a search bar with the placeholder text 'ENTER KEYWORD, HASHTAG, USERNAME...' and a 'SEARCH' button. To the right of the search bar, there is a 'CHOOSE TIMEFRAME' section with a date range '1 / 4 / 2024 - 15 / 4 / 2024'. The main content area is a world map showing various countries highlighted in different colors. On the right side, there is a section titled 'MOST RECOMMENDED VIDEOS GLOBALLY' with a date range '01/04/2024 - 15/04/2024' and a 'Download CSV' link. Below this, there are four video entries, each with the following details:

- Author Name:** Melanie
- Comments:** 12000
- Likes:** 2400000
- Shares:** 7597
- Created Time:** 20/02/2024 18:41:49
- Description:** #foryoupage @my teacher @ the end
- Music Title:** tokold on all plats
- Countries video appears in:** [List of countries]

- Author Name:** ItssMrO
- Comments:** 8483
- Likes:** 77900
- Shares:** 13700
- Created Time:** 11/03/2024 18:12:01
- Description:** USE CODE: ItssMrO!!
##itssmro##fortnite##fortniteclips##fortnitememes##fortnitefunny##fortnitebros
#fortniteupdate
- Music Title:** original sound
- Countries video appears in:** [List of countries]
- Author Name:** Aleskoko
- Comments:** 121
- Likes:** 250700
- Shares:** 834
- Created Time:** 10/03/2024 14:59:31
- Description:** no data
- Music Title:** som original
- Countries video appears in:** [List of countries]
- Author Name:** hylotinn
- Comments:** 2391
- Likes:** 219500
- Shares:** 7247
- Created Time:** 28/02/2024 01:34:27
- Description:** Despicable me voice over #fyp #viral #despicablemevoiceover
#fypcover #vidoeactor #despicableme #browhisp #viralvideo
- Music Title:** original sound
- Countries video appears in:** [List of countries]

[Visit TikTok Global Observatory \(TKGO\)](#)

Policy and Advocacy

While our primary focus is to conduct algorithmic investigations, our expertise is called upon **to support advocacy efforts and inform policy with technical insights and data-driven research**. For instance, AI Forensics' director testified on a TikTok commission in front of the French Senate. We also actively engage with various initiatives and partners in the digital rights ecosystem, including the EU Commission's Code of Practice, EDRI, Mozilla, PeoplevsBigTech, SNV or Algorithm Watch.

Our main focus is the EU legal framework, which is setting a global standard for technology regulation. Specifically, the implementation of the Digital Service Act **and European AI Act** will be particularly impactful. Our focus on these two milestone legislation is in synergy with the rest of our strategy, as they respectively aim to regulate recommender systems and generative AIs, with specific provisions on electoral contexts.



We would like to highlight some of related achievements of 2023:

- AI Forensics joined the **European Commission's Code of Practice on Disinformation** to support its mission by promoting algorithmic transparency and accountability through algorithmic auditing and by participating in its subgroups on Generative AI and the Elections Monitoring Working Groups of the Crisis Response Subgroup.
- We endorsed and contributed to various open letters and campaigns. For instance, we [provided feedback](#) on the Delegated Regulation on data access proposed by the Digital Service Act. Additionally, we collaborated with Algorithm Watch to [jointly submit feedback](#) on the Delegated Regulation regarding independent audits proposed by the Digital Service Act.
- We were invited **to be part of the expert group on technology of the [French General States on Information](#)**, a national consultation at the initiative of the French President to craft a concrete action plan to protect the right to information.

Our reports have made a significant impact on policy both at the national and EU levels. This impact has been evident through increased meetings, participation in events and conferences, as well as invitations for public speaking engagements and valuable contributions. We are grateful to witness a growing recognition of AI Forensics as a trusted technical expert in algorithmic investigations and a key contributor to evidence-based policy and advocacy discussions in Europe.

Finances & Grants

Throughout the year, our focus has been on **strategically bolstering support for our initiatives in 2023 and beyond**. With increased resources allocated to fundraising tasks within our team, we dedicated significant attention to this vital aspect of our operations.

Our primary objective was to **secure additional funds, emphasizing a higher proportion of core and multi-year funding, as well as increased collaborations contracts**.

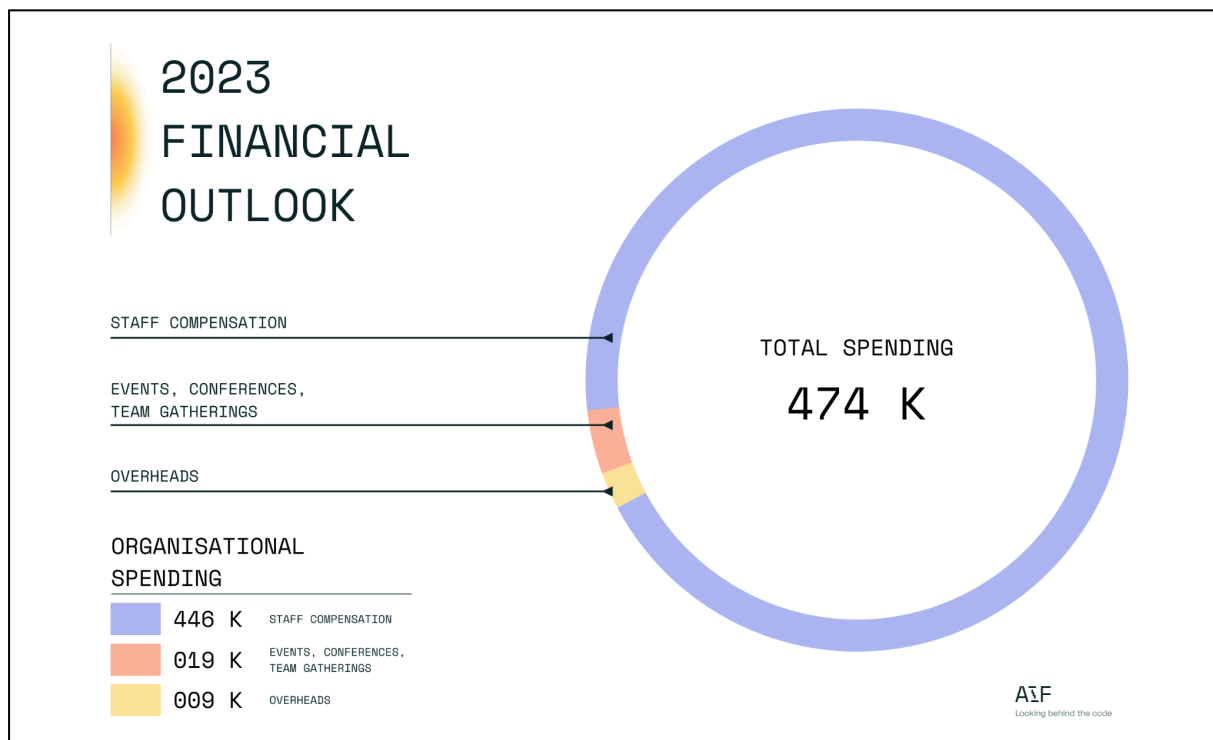
In 2023 we were confirmed to receive support from a number of organizations and philanthropies both as organizational/core funding and project-based funding, securing our work in 2024 and extending support for 2025.

We want to express our heartfelt gratitude to our funders for their unwavering support. Your generosity has been instrumental in driving our mission forward and making a tangible difference. Thank you for partnering with us in our efforts to create positive change.



Finances

After successfully transitioning and rebranding, we set the ground for a good financial year. One of our standout achievements was **to have increased our annual budget by 50% compared to the previous year** with 82% coming from philanthropic fundings and grants, as well as 18% from the collaborations contracts.



Thank you !

We want to extend a heartfelt thank you to our donors, partners, and peer organizations within the ecosystem. Your support, collaborative spirit, and willingness to work together have been invaluable to us this year. Together, we've accomplished so much more than we could have alone. Whether it was through financial contributions, joint projects, or sharing resources and expertise, your efforts have made a significant difference in our ability to work towards our mission. We deeply appreciate your partnership and look forward to further collaborations in the future.

Credits:

Katsiaryna Viadziorchyk :

Report writing

Miazia Schueler, Raziye Buse Çetin:

Editing

Denis Constant / Ittai Studio :

Graphic & Brand Design

<https://ittai.co/>

<https://www.instagram.com/ittai.sys/>

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Email :

info@aiforensics.org

Social Media :

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