**GENERAL INFORMATION**

**Title of consultancy:** Research consultant to produce an overview of corruption in artificial intelligence and machine learning systems

**Application closing date:** 31st March 2022

**Consultancy start and end date:** 14 April 2022 – 31 May 2022

**Estimated completion time:** 15 working days

**Location:** Home-based (remote)

**BACKGROUND**

Transparency International (TI) is the global civil society organisation leading the fight against corruption. Through more than 100 chapters worldwide and an international secretariat in Berlin, Germany, TI raises awareness of the damaging effects of corruption and works with partners in government, business and civil society to develop and implement effective measures to tackle it.

The presence of digital systems based on non-deterministic technology like Artificial Intelligence or Machine Learning (AI/ML) is growing. People's lives are highly impacted by systems that select which social media posts they see, filter their applications for loan, insurance and job positions, operate medical devices, drive automated cars and conduct surveillance. There are many well-known examples of biased systems that generate unfair, unethical or discriminatory decisions in policing, application processing, health care or credit approvals. TI suspects that there are many further cases that have not been never made public.

Because AI/ML algorithms are very opaque, their training and transactional data is typically shielded from public view, any **intended** bias or corruption built into them is very difficult to detect, expose and mitigate. AI/ML systems are expected to comply with the law, but there are no currently enforced industry-wide agreed standards for algorithmic transparency, auditability and accountability.

For this project, TI defines corruption of AI/ML systems as follows:

*We define corruption in the domain of artificial intelligence as the intended abuse of Artificial Intelligence systems for private gain.*

*AI algorithms can be intentionally biased to obtain private gain, such as self-enrichment or political advantage, by those with entrusted power to setup, train and operate the AI systems.*

This work must be in alignment with TI's definition of corrupt AI/ML systems above and a continuation of the TI Research Paper “algorithmic transparency and accountability”

The cases identified by this work will provide a basis for TI chapters to advocate for enhanced means of detecting and mitigating the corrupt abuse of AI/ML systems, as well as push for regulatory or legislative entities to employ a more complete range of oversight mechanisms.
OBJECTIVES

The objective of this consultancy is to identify contemporary ways – ideally real cases but perhaps hypothetical examples – in which artificial intelligence and machine learning algorithms are used with corrupt intent.

SCOPE OF THE EXERCISE

The project must produce

- A research paper outlining the findings
- A presentation, aligned with the research paper and designed for general awareness for a non-technical audience
- A virtual, recorded session for TI general audience presentation of above materials

The paper and presentation should cover the following elements with emphasis on real-world examples. A proposed outline would be as follows.

1. Executive summary
2. Defining Corrupt Artificial Intelligence and Machine Learning Systems (see TI’s definition of corrupt AI/ML systems as above)
3. Examples of biased AI systems where the bias is introduced by intention
   a. Commercial business domain
   b. Public administration domain
   c. Political domain
4. Examples that possibly corrupted AI systems where examples match the TI definition of AI corruption
   a. Commercial business domain
   b. Public administration domain
   c. Political domain
5. Conclusions

The project should focus on real-world examples of AI/ML corruption as defined by TI in the background section.

The scope excludes a view of (un)intended bias that leads to unfair, unethical or discriminatory behaviour of AI/ML systems, unless it can be categorised as corruption (i.e. there is an element of private gain).

DATA COLLECTION METHODS

The researcher will scan media reports for potential cases that meet the threshold criteria for corruption, as well as conducting key informant interviews with individuals, developing and/or deploying these systems.

In accordance with TI policy, all research should clearly indicate and acknowledge all sources used and the reader should be able to trace the source of information in footnotes and bibliography.

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1 The commercial business domain could include insurance, banking, manufacturing and social media.
2 The public administration domain could include public budgeting processes, public contracting, service delivery, regulatory oversight, law enforcement and justice.
3 The political domain could include election data and voter registration, political advertising and so on.
EXPECTED DELIVERABLES AND TIMELINE
The selected consultant will be expected to conduct research and compile the overview with the guidance of Transparency International. The expected deliverables are:

- A research plan for comments by TI.
- A detailed draft outline for comments by TI. This should include the elements as listed above.
- A full draft paper including any annexes for review and comments by TI. The full draft should be between 15-25 pages excluding annexes and bibliography.
- A final draft of the report and presentation deck with all comments fully addressed to the satisfaction of TI.
- A recorded virtual session where the final deck is presented to a TI audience.
- The consultant should be available for calls to discuss the task.

The indicative estimated time to complete this assignment is 15 working days from 14 April 2022 – 31 May 2022. Please note that this timeline is tentative and can be slightly revised once a research consultant has been selected and a research plan has been drawn up.

The selected consultant has the sole responsibility to conduct the research and meet all deliverables in accordance with the agreed methodology and timeline. The consultant is also expected to work in close collaboration with TI experts throughout the process. TI retains the sole rights with respect to all distribution, dissemination and publication of the deliverables.

SELECTION CRITERIA
A suitable candidate should have the following qualifications:

- An advanced university degree in a relevant academic field (information technology, data management and analytics, law, economics, political science, sociology or other related fields)
- Substantive and demonstrable expertise on the development, deployment and operation of AI/ML systems, which may include publication of reports or papers relevant to the topic.
- Familiarity with relevant principles and industry standards is desirable.
- Direct experience working with/or in AI/ML projects is an added advantage.
- Excellent drafting and report writing skills.
- High attention to detail.
- Fluency in written and spoken English.
- Value for money

REMUNERATION AND COSTS
The consultant should provide their estimated total fee as a lump sum or as standard daily or hourly rates as gross inclusive of taxes and other charges.

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4 Such as, for instance, the EU’s [Ethics Guidelines for Trustworthy AI](https://www.eugeneraldataprotectionregulation.eu/), UNESCO’s [Recommendation on the Ethics of Artificial Intelligence](http://unesdoc.unesco.org/), OECD’s [Recommendation of the Council of Artificial Intelligence](https://www.oecd.org), the Association for Computing Machinery’s [Principles for Algorithmic Transparency and Accountability](https://www.acm.org), the Centre for Data Ethics’s [Review into Bias in Algorithmic Decision Making](https://www.education.gov.uk/) and the UK’s [algorithmic transparency standard](https://www.gov.uk/).
CONTACT INFORMATION

In order to be considered, applicants must provide the following documents in English:

- A short overview of how the assignment will be approached, including (i) a draft structure, (ii) reflections on the differences between (un)biased and corrupt AI/ML systems, and (iii) an indicative literature list. This should not exceed 3 pages.
- An up-to-date CV and cover letter
- An indicative budget
- A writing sample
- Contacts of two people willing to be contacted for their reference

Please indicate “Research consultant: corrupting AI/ML systems” in the subject line of your email application. Applications should be sent in English by email to SANCUSconsultancy@transparency.org by 6pm (Berlin time) of 31 March 2022.

Please note that only shortlisted applicants will be contacted.

Transparency International Secretariat is committed to creating an inclusive work environment where diversity is valued and where there is equality of opportunity. We actively seek a diverse applicant pool and therefore welcome applications from qualified candidates of all regions, countries, cultures, and backgrounds. Selection of candidates is made on a competitive basis, and we do not discriminate based on national origin, race, colour or ethnic background, religious belief, sex, gender identity and expression or sexual orientation, marital or family status, age, or ability. We kindly ask applicants to refrain from including in their application information relating to the above as well as from attaching photos.

Data Protection

When you respond to this tender and submit your application, you provide consent that Transparency International e. V. keeps your application materials for the period of ten years according to German legal requirements. Afterwards Transparency International will delete your application and any personal data included in it. If you have any questions, please reach out to dataprotection@transparency.org.