

February 01, 2024

## **NIST AI Executive order Request for Information (RFI) related to Executive Order 14110**

Mirza AI, an independent player in the AI world, appreciates the groundbreaking work NIST is doing in Artificial Intelligence. This combined with the various tasks set out in Executive Order 14110 has the potential of harnessing AI for the greatest possible good.

We stand on the cusp of a historical moment in time. Comparable with the invention of the printing press, and development of computer technology; we are at the dawn of the AI age. This brings tremendous opportunity combined with great responsibility. In all our actions we should strive to think and act as visionaries. We are creating the framework and highways for many generations to come. In addition, we might also be creating the guardrails which will save humankind itself. No task should be too hard for us to do, no vision too difficult to achieve.

Given below, we outline some of the components needed to do justice to the objectives of EO 14110.

- **Create a professional body of certified AI professionals.** This will ensure a strong and widely available group of AI professionals who are proficient in both ethical foundations and technological skills needed for placing the discipline of AI on a sound footing. Mandate that all AI professionals have ethics training and if possible pass an ethics exam once in three years. This would be similar to professionals in other fields who navigate ethical questions.
- **AI Ethics Head.** Mandate the creation of an AI Ethics Head in every organization which receives any federal funding.
- **Create curated databases and test-beds for AI testing.** Create large (massive) freely-available sources of data which have been curated and checked for reasonable levels of accuracy and freedom from overt bias. These data-stores can be used by AI professionals to check their models. Such open-source data repositories will necessarily need to be protected against malicious actors who seek to change or corrupt the data stores.
- **Tackle the use of AI by the 'bad guys'.** It is inevitable that malicious actors, from script-kiddies to nation-state agencies will attempt to use AI in different ways. NIST will need to give sufficient thought on how these 'bad guys' actions can be flagged. Currently we have a database for cyber vulnerabilities: "The Common Vulnerabilities and Exposures (CVE) system". We would need a similar 'AI Vulnerabilities Enumeration System'.

- **Copyright protections.** Create guidelines which ensure that copyright violations are flagged. Ideally such a module should be part of all AI tools. In addition a freely available service can be created to level-set this concern.
- **Develop and expand AI Commons.** Assist in starting an Open Source AI Foundation. This will create a large space for AI Commons used by small organizations and even individuals in the field. Users in marginalized communities will have an ability to use AI or seek out groups which can enable them to easily use AI.
- **Encourage Data Privacy and Traceability.** Traceability is a verifiable, and auditable system which answers the question 'from where?' AI solutions should be capable of following information backward from prediction to the original trained data/records that produced those outputs and predictions.
- **Create levels of Trust Certification for AI Models:** Going forward any AI used for public services or commercial activity should, mandatorily require a high level of Trust Certification. (Very High, or High only)
- **Mandatory AI incident reporting.** Create a mandatory reporting requirement for any breakout or incident related to AI. Any incident where the AI runs 'amok', tries to seize control or significantly deviates from its stated purpose should be defined as a reportable incident. This would be similar to the FTC requirement for reporting cyber incidents.  
<https://www.ftc.gov/news-events/news/press-releases/2023/10/ftc-amends-safeguards-rule-require-non-banking-financial-institutions-report-data-security-breaches>

Sincerely,

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