

To: [Aiframework](#)
Subject: AI Risk Management Framework: Initial Draft
Date: Thursday, April 28, 2022 5:37:10 PM

These are only a few of the opportunities, perhaps priorities, that must be addressed per the document Scope and Audience section. As an aside, in industry, we typically look for a Purpose section.

Randy . . .

Page 1: Figure 1 identifies "expert end-user

Comment: What is an expert end-user? This appears extremely ambiguous as someone that develops code for autonomous systems may not be an expert. Furthermore, one could develop blackbox AI algorithms, and be completely uninformed of the system spec/design. Since this term is not defined, I strongly recommend it be removed as this is too subjective.

Page 9, Section 5.1.2, line 19. "mitigate"

Comment: mitigate definition in terms of AI framework? Currently risk mitigation or influence/impact of Bias use activation functions as one approach to mitigate. Additionally, Reliability is different than "correctness" which should be included in the Framework. Recommend a Section on Correctness be added. I take exception to the term "model" as this may be ambiguous to different stakeholders. Also, replace the 2nd sentence as this is not a practice or technique used in various sectors.

Page 10, Section 5.1.3, Line 4

Comment: Robustness and function is a relative term. If a transistor or active component goes bad, the algorithm (not model) may function. This Section is confusing because it could give the impression or understanding everything is ok, even if a few circuits are not functioning. This Section must be completely reworked due to ambiguity and accuracy.

Page 10, Section 5.2, line 34

Comment: what is a "lifecyle" (See Figure 6)

Comment: Lifecyle with an AI algorithm and may not exist in the conventional sense. One could imagine an AI algorithm is reused or redeployed (not illustrated in Figure 6). In fact, with an unsupervised algorithm, the lifecycle could be every instance it is run. Lifecyle needs to be clearly defined in the context of Framework.

Page 10, Section 5.2, line 37

Comment: what is "explainability" or "interpretability" in terms of context and stakeholder. Also, privacy is not secure or security, and this is an important socio-technical consideration. Different societal norms mean different socio-technical context, and Section 5.2 does not sufficiently describe this matter. 5.2 needs to be reworked so People developing code can understand the important items in 5.2.

Page 13, Section 5.3.3, line 25

Comment: Transparency and "available" are perhaps context sensitive. Furthermore, transparency must be considered when developing the algorithm. That is, without the proper hooks gaining access and having availability may not be possible. This section needs further embellishment for developers and system integrators so this can be built into the algorithm. How decisions are made is far too vague. The current Section is not necessarily usable by developers.

Page 15, Section 5.2.5, line 17

Comment: Perhaps "do no harm" should be equally important as "fairness". Section 5.3.1 discusses Fairness, and adding "do no harm" and embellishing would make the Framework more resilient.