

Questions for the survey on criteria for Explainable AI for laypeople

Importance of explanations

1. it is important to me to know how an AI arrived at a decision or recommendation. *
2. when making recommendations online (Netflix, Amazon, Spotify, Google search results, etc.), I would like to know how they came about. *
3. when using AI in critical situations (e.g. to support operations, autonomous driving, etc.), it is important to me that the AI can explain how its recommendations or decisions were arrived at.
4. as long as the AI delivers good results, I don't care how they came about. *
5. i would rather have no explanation for an AI decision than a bad explanation. *
6. [Free text] In which specific situations is an explanation of an AI decision important to you?

Extensiveness of explanations

1. it is important to me to be able to understand the explanation of how an AI came to a decision, at least in principle, down to the smallest detail. *
2. a rough explanation of how an AI came to a decision is quite sufficient for me. *
3. I only want to be able to actively ask for an explanation of an AI's decision if necessary. *
4. I want an AI to provide an explanation on its own and I don't have to ask for it. *
5. an explanation should be given very superficially at the beginning and presented in more detail when needed. *
6. it is important to me that the AI's decision is explained in minute detail, even if I do not fully understand it. *
7. i would take a lot of time to understand an explanation of an AI system. *
8. it is important to me to be able to understand an explanation of an AI decision very quickly. *
9. for a good explanation, it is important to me to be able to try "what if" cases. (Example: How would my credit score change if I lived in a different part of town). *
10. you have to make a difficult decision (e.g. you could lose a lot of money). You are supported in this decision by an AI. How strongly does the following statement apply to you: "I would try a lot of "what if" cases to come to a decision"? *
11. you have to make an easy decision (e.g. choosing a film for the evening's television). You are assisted in this decision by an AI. How strongly does the following statement apply to you: "I would try a lot of "what if" cases to come to a decision". *
1. An AI system whose explanations I can adapt to my own needs through continuous interaction with the system (e.g. through feedback or natural language dialogue) would be optimal for me. *

12. in your view, what would be other interactive elements that play a role in explanations for AI decisions?

Explanation with uncertainty

1. it is particularly important to me to recognise how certain an AI is in making a decision. *
2. if an AI is uncertain about a decision, I would still like to get an explanation that I can evaluate for myself. *
3. if an AI is uncertain about a decision, I don't need an explanation, because I will reject the decision in any case. *
4. you have to make a decision that you are not very sure about. However, you have a tendency. An AI has the same tendency but is only 30% sure that this decision will produce a positive result. What do you do? *
13. How do you feel about the decision you have just made? *
14. You have to make a decision that you are not very sure about. However, you have a tendency. An AI has the same tendency, but is only 30% sure that this decision will produce a positive result. The AI provides a plausible explanation for this decision. What do you do. *
 - a. I decide in favour of my tendency
 - b. I do not decide
7. how do you feel about the decision you have just made? *
15. You have to make a decision that you are not very sure about. However, you have a tendency. An AI has a different tendency and is 90% sure that this decision will produce a positive result. What do you do? *
 - a. I decide on my tendency
 - b. I decide for the AI
 - c. I do not decide
8. how do you feel about the decision you have just made? *
9. you have to make a decision that you are not very sure about. However, you have a tendency. An AI has a different tendency and is 90% sure that this decision will produce a positive result. The AI provides a plausible explanation for this decision. What do you do? *
 - a. I decide in favour of my tendency
 - b. I decide for the AI
 - c. I do not decide
10. how do you feel about the decision you have just made? *

Explanation with certainty

1. you have to make a decision that you are very sure about. An AI has a different opinion and is 90% sure that this decision will produce a positive result. What do you do? *
 - a. I decide in favour of my tendency
 - b. I decide for the AI

- c. I do not decide
- 2. how do you feel about the decision you have just made? *
- 3. you have to make a decision that you are very sure about. An AI has a different opinion and is 90% sure that this decision will produce a positive result. The AI provides a plausible explanation for this decision. What do you do? *
 - a. I decide in favour of my tendency
 - b. I decide for the AI
 - c. I do not decide
- 4. how do you feel about the decision you have just made? *

Trust in AI

- 1. I am generally sceptical about AI *
- 2. I clearly see more potential than danger in the use of AI *
- 3. I regularly use apps with AI-supported functions (e.g. Google Maps, Amazon, Spotify, Netflix) *
- 4. for me to trust an AI, it is important that it discloses its internal workings, even if I wouldn't understand everything. *
- 5. for me to trust an AI, it is important that it can explain every single decision. *
- 6. for me to trust an AI, it is important to be able to ask the AI "what if" questions. (Example: How would my credit score change if I lived in a different part of town?) *
- 1. For me to trust an AI, it is important that it provides a plausible explanation for a decision. *
- 7. for me to trust an AI, it is important that it provides all possible plausible explanations for a decision. *
- 8. for me to trust an AI, it is important that, despite a plausible explanation, I can make the decision myself. *
- 9. i would not trust an AI system that occasionally provides non-plausible explanations. *
- 10. how would explanations of an AI system have to be designed (not only visually) so that you could trust it? *
- 2. 12 [Free text] How would explanations of an AI system have to be designed (not only visually) for you not to trust it? *

Self-determination

- 1. using an AI system that provides comprehensible explanations for decisions, I would feel more competent in using the AI system. *
- 2. an AI system that provides comprehensible explanations for decisions would make me feel in control. *
- 3. an AI system that provides comprehensible explanations for decisions would make me feel more secure. *
- 4. an AI system that provides comprehensible explanations for decisions would motivate me to use the AI system. *
- 5. an AI system that provides comprehensible explanations for decisions would appeal to my curiosity, so that I would also obtain explanations in non-critical situations. *

Potentials and problems of Explainable Artificial Intelligence

1. [Free text] What potential do you see in the use of explainability in AI systems?
2. [Free text] What problems do you see in the use of explainability in AI systems?

About the person

1. [Free text] What age group do you belong to? *
 - a. 14 to 17
 - b. 18 to 24
 - c. 25 to 34
 - d. 35 to 50
 - e. 50 to 59
 - f. 60 and older
2. gender *
 - a. Female
 - b. Male
 - c. Other
3. in which industry do you work? *
 - a. Banking & Finance
 - b. Education
 - c. IT
 - d. Culture
 - e. Medicine
 - f. Care
 - g. Law (e.g. lawyer)
 - h. Social work
 - i. Insurance
 - j. Other
4. [Free text] If you selected "Other" in the previous question, you can indicate your industry here.