

QUESTIONNAIRE OF ONLINE SURVEY

1.1 Question Types

There were four different types of questions used in our survey:

- **7-scale:** 7-scale Agreement/Disagreement
Strongly agree/disagree, Moderately agree/disagree, Slightly agree/disagree, and Neutral
- **Y/N:** Yes and No
- **Open:** Open-ended
- **Check:** Check all that apply

1.2 Pre-Questions

Q1: [Open] *“Please indicate your gender.”*

Q2: [Open] *“Please indicate your age.”*

Q3: [Y/N] *“Have you had a personal, volunteer, or work experience interacting with visually impaired people?”*

Q4: [Y/N] *“Have you helped strangers with visual impairments in public spaces?”*

Q5: [Y/N] *“Have you seen robots moving about in public spaces?”*

Q6: [Y/N] *“Have you been involved in the development, promotion, marketing, or sale of robots?”*

1.3 After Watching Video A (Robot & User)

Q7A: [7-scale] *“I would feel uncomfortable if the robot moves about with a blind person in public buildings.”*

Q8A: [7-scale] *“I would feel obstructed if the robot moves about with a blind person in public buildings.”*

Q9A: [7-scale] *“I would feel unsafe if the robot moves about with a blind person in public buildings.”*

Q10A: [Check] *“What kind of information about yourself would you not mind being detected by the camera attached to the robot assisting blind people?”*

- | | | |
|---------------------|-------------------------|---|
| • Body outline | • Gender | • (If you know the user) Your name |
| • Distance | • Height | • (If you do not know the user) Your name |
| • Face | • Hair color | • All information about me |
| • Face orientation | • Objects being carried | • None of the above |
| • Facial expression | • Ethnicity | |
| • Age | • Action | |

Q11A: [7-scale] *“Feature 1 (Navigation) should be implemented in the robot assisting a blind person.”*

Q12A: [7-scale] *“I am OK with the robot’s camera capturing me if it is used for Feature 1 (Navigation) of the robot assisting a blind person.”*

Q13A: [7-scale] *“The robot navigating a blind person to a destination looked natural.”*

Q14A: [7-scale] *“Feature 1 (Navigation) could malfunction.”*

Q15A: [7-scale] *“Feature 2 (Pedestrian Avoidance) should be implemented in the robot assisting a blind person.”*

Q16A: [7-scale] *“I am OK with the robot’s camera capturing me if it is used for Feature 2 (Pedestrian Avoidance) of the robot assisting a blind person.”*

Q17A: [7-scale] *“The robot and a blind person avoiding pedestrians looked natural.”*

- Q18A:** [7-scale] *“Feature 2 (Pedestrian Avoidance) could malfunction.”*
- Q19A:** [7-scale] *“Feature 3 (Riding an Elevator) should be implemented in the robot assisting a blind person.”*
- Q20A:** [7-scale] *“I am OK with the robot’s camera capturing me if it is used for Feature 3 (Riding an Elevator) of the robot assisting a blind person.”*
- Q21A:** [7-scale] *“The robot and blind person riding an elevator looked natural.”*
- Q22A:** [7-scale] *“Feature 3 (Riding an Elevator) could malfunction.”*
- Q23A:** [7-scale] *“Feature 4 (Standing in a Line) should be implemented in the robot assisting a blind person.”*
- Q24A:** [7-scale] *“I am OK with the robot’s camera capturing me if it is used for Feature 4 (Standing in a Line) of the robot assisting a blind person.”*
- Q25A:** [7-scale] *“The robot and a blind person standing in a line looked natural.”*
- Q26A:** [7-scale] *“Feature 4 (Standing in a Line) could malfunction.”*
- Q27A:** [7-scale] *“I am OK with the camera attached to the robot assisting a blind person capturing me, if it is used for assisting blind people only and the captured data is used for one-time detection only and not saved.”*
- Q28A:** [7-scale] *“I am OK with the camera attached to the robot assisting a blind person capturing me, if it is used for assisting blind people only and the captured data is saved.”*
- Q29A:** [7-scale] *“I am OK with the camera attached to the robot assisting a blind person capturing me, if it is used for not only assisting blind people and the captured data is used for one-time detection only and not saved.”*
- Q30A:** [7-scale] *“I am OK with the camera attached to the robot assisting a blind person capturing me, if it is used for not only assisting blind people and the captured data is saved.”*
- Q31:** [Check] *How many people were standing in the line when video A was introducing Function 4 (Standing in a Line)?*
- One person
 - Two people
 - Four people

1.4 After Watching Video B (Robot Only)

- Q7B:** [7-scale] *“I would feel uncomfortable if the robot moves about in public buildings.”*
- Q8B:** [7-scale] *“I would feel obstructed if the robot moves about in public buildings.”*
- Q9B:** [7-scale] *“I would feel unsafe if the robot moves about in public buildings.”*
- Q10B:** [Check] *“What kind of information about yourself would you not mind being detected by the robot’s camera?”*
- | | | |
|---------------------|-------------------------|---|
| • Body outline | • Gender | • (If you know the user) Your name |
| • Distance | • Height | • (If you do not know the user) Your name |
| • Face | • Hair color | • All information about me |
| • Face orientation | • Objects being carried | • None of the above |
| • Facial expression | • Ethnicity | |
| • Age | • Action | |

- Q11B:** [7-scale] *“Feature 1 (Navigation) should be implemented in the robot.”*
- Q12B:** [7-scale] *“I am OK with the robot’s camera capturing me if it is used for Feature 1 (Navigation) of the robot.”*
- Q13B:** [7-scale] *“The robot moving to a destination looked natural.”*

- Q14B:** [7-scale] *“Feature 1 (Navigation) could malfunction.”*
- Q15B:** [7-scale] *“Feature 2 (Pedestrian Avoidance) should be implemented in the robot.”*
- Q16B:** [7-scale] *“I am OK with the robot’s camera capturing me if it is used for Feature 2 (Pedestrian Avoidance) of the robot.”*
- Q17B:** [7-scale] *“The robot avoiding pedestrians looked natural.”*
- Q18B:** [7-scale] *“Feature 2 (Pedestrian Avoidance) could malfunction.”*
- Q19B:** [7-scale] *“Feature 3 (Riding an Elevator) should be implemented in the robot.”*
- Q20B:** [7-scale] *“I am OK with the robot’s camera capturing me, if it is used for Feature 3 (Riding an Elevator) of the robot.”*
- Q21B:** [7-scale] *“The robot riding an elevator looked natural.”*
- Q22B:** [7-scale] *“Feature 3 (Riding an Elevator) could malfunction.”*
- Q23B:** [7-scale] *“Feature 4 (Standing in a Line) should be implemented in the robot.”*
- Q24B:** [7-scale] *“I am OK with the robot’s camera capturing me, if it is used for Feature 4 (Standing in a Line) of the robot.”*
- Q25B:** [7-scale] *“The robot standing in a line looked natural.”*
- Q26B:** [7-scale] *“Feature 4 (Standing in a Line) could malfunction.”*
- Q27B:** [7-scale] *“I am OK with the robot’s camera capturing me, if it is used for assisting blind people only and the captured data is used for one-time detection only and not saved.”*
- Q28B:** [7-scale] *“I am OK with the robot’s camera capturing me, if it is used for assisting blind people only and the captured data is saved.”*
- Q29B:** [7-scale] *“I am OK with the robot’s camera capturing me, if it is used for not only assisting blind people and the captured data is used for one-time detection only and not saved.”*
- Q30B:** [7-scale] *“I am OK with the robot’s camera capturing me, if it is used for not only assisting blind people and the captured data is saved.”*
- Q32:** [Check] *“How many standing people did the robot avoid when video B was introducing Function 2 (Pedestrian Avoidance)?”*
- One person
 - Two people
 - Three people
- Q33:** [Check] *“How many people were riding in the elevator when video B was introducing Function 3 (Riding an Elevator)?”*
- Zero
 - One person
 - Two people