Pre-Drive Questionnaire

As part of this study, it is useful to collect information describing each participant. The following questions ask about your basic demographic information, your trust in automation, and your understanding of a driving automation system. Please read each question carefully. If something is unclear, ask the researcher for help. Your participation is voluntary, and you may skip any questions that you do not wish to answer.

Demographics

1. What is your age?
2. What is the sex listed on your driver's license?
    a. Male
    b. Female
    c. X
3. How do you identify with respect to your gender identity?

4. What is your race and/or ethnicity?
    a. **American Indian or Alaska Native** – Enter, for example Navajo Nation, Blackfeet Tribe of the Blackfeet Indian Reservation of Montana, native Village of Barrow Inupiat Traditional Government, Nome Eskimo Community, Aztec, maya, etc.

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    b. **Asian** – Provide details below.
        i. Chinese
        ii. Vietnamese
        iii. Asian Indian
        iv. Korean
        v. Filipino
        vi. Japanese

       vii. Enter, for example, Pakistani, Hmong, Afghan, etc. _____

c. **Black or African American** – Provide details below.
- i. African American
- ii. Nigerian
- iii. Jamaican
- iv. Ethiopian
- v. Haitian
- vi. Somali
- vii. Enter, for example, Trinidadian and Tobagonian, Ghanaian, Congolese, etc. _____

d. **Hispanic or Latino** – Provide details below.
- i. Mexican
- ii. Cuban
- iii. Puerto Rican
- iv. Dominican
- v. Salvadoran
- vi. Guatemalan
- vii. Enter, for example, Colombian, Honduran, Spaniard, etc.

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e. **Middle Eastern or North African** – Provide details below.
- i. Lebanese
- ii. Syrian
- iii. Iranian
- iv. Iraqi
- v. Egyptian
- vi. Israeli
- vii. Enter, for example, Moroccan, Yemeni, Kurdish, etc. _____

f. **Native Hawaiian or Pacific Islander** – Provide details below.
- i. Native Hawaiian
- ii. Tongan
- iii. Samoan
- iv. Fijian
- v. Chamorro
- vi. Marshallese
- vii. Enter, for example, Chuukese, Palauan, Tahitian, etc.

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g. **White** – Provide details below.
- i. English
- ii. Italian
- iii. German
- iv. Polish

v. Irish
   vi. Scottish
  vii. Enter, for example, French, Swedish, Norwegian, etc.
       _____

Trust Scale

Below is a list of statements for evaluating trust between people and automation. There are several scales for you to rate the intensity of your feeling of trust, or your impression of the system while operating a machine. Please select the value (*1 – Not at all* through *7 - Extremely*) that best describes your feeling or your impression.

Scale: *(Not at all) 1-2-3-4-5-6-7 (Extremely)*

<mark>Define the system to which they were randomly assigned.</mark>

1. The [condition]system is deceptive
2. The system behaves in an underhanded manner
3. I am suspicious of the system's intent, action, or outputs
4. I am wary of the system
5. The system's actions will have a harmful or injurious outcome
6. I am confident in the system
7. The system provides security
8. The system has integrity
9. The system is dependable
10. The system is reliable
11. I can trust the system
12. I am familiar with the system

Mental Model Assessment

The following questions will ask you about a driving automation system you might experience today. For each question, please indicate whether the statement is "True" or "False", then rate your confidence in your response (No Confidence, Slight Confidence, Moderate Confidence, High Confidence).

1. While the system is active/engaged, the driver needs to monitor surroundings in case they need to take over control of the vehicle
2. The system will monitor the driving conditions and will notify the driver when they need to resume control
3. When active/engaged, the system is completely self-driving and requires no monitoring by the driver
4. The system will alert you when you are looking away from the road for too long
5. The system will deactivate when you come to a complete stop
6. The system can handle gentle corners
7. Inclement weather may impede the system's ability to identify objects and road markings
8. The system can assist you while you enter or exit the interstate
9. The system will work on roads without lines or markings

10. The system will be deactivated if it no longer senses a vehicle ahead
11. You may read a book while the system is active/engaged
12. The system can be deactivated at any time
13. The system automatically suspends itself when the vehicle exceeds a certain speed
14. The system will be automatically suspended when the windshield wipers are set to high
15. Pressing the brake or the accelerator will deactivate the system
16. The system responds to pedestrians walking on the sidewalk
17. The system provides both steering and braking to avoid a pedestrian
18. The system may not detect a pedestrian who suddenly crosses in front of you
19. Dark conditions may reduce the system's ability to respond to pedestrians
20. The system will warn you when you enter an area with heavy congestion
21. The system may react to traffic lights and/or signs
22. The system will provide steering input to keep the vehicle in its lane
23. The system can drive in a work zone where lanes have shifted from their usual location
24. The system will change lanes to pass a slower moving vehicle ahead
25. The systems maintains the speed that you have set when there are no vehicles detected in the lane ahead
26. The system will accelerate if a slower vehicle ahead moves out of the detection zone
27. The system ss meant to be used on highways and interstates
28. The system may not correctly detect stopped vehicles in your lane
29. The system reacts to stationary objects on the road (construction cone, tire, ball)
30. The system is meant to be used in slow and heavy traffic
31. The system will react immediately to vehicles merging onto the road in front of you
32. The system reacts to oncoming traffic
33. The system adjusts the vehicle speed when approaching tight curves
34. The system works even when the radar sensor is dirty