Title of research study: Al-generated Multimodal Feedback for Drone Teleoperation

IRB Protocol Number: 24-0575

Investigator: Sriram Sankaranarayanan

Sponsor: National Science Foundation

The purpose of the research is to understand how feedback generated with Artificial Intelligence (AI) tools helps people learn how to fly a drone. We expect you will be in this research study for up to one hour and that 300 people will participate in it. Whether or not you take part in this research is your choice. You can leave the research at any time, and it will not be held against you.

Your study visit will consist of up to a one-hour session playing an online game. The game consists of landing a simulated drone in the computer browser using your keyboard. You will complete the game 20 times. You will receive AI-generated feedback each time you complete the game to help you improve your performance. The feedback will be a score, a text paragraph, or an image showing your trajectory in the game. We will record how well you did in the game. If you complete the study, you will be compensated at a rate of \$15 per hour, which will be sent to your account within one week.

Your participation will consist of playing the game and answering a short 3-question online questionnaire about the feedback you received each time you play the game. You will also complete one short 7-question online questionnaire with basic demographic information (such as your age and experience flying drones) after you complete the study. You will be directed to the game instructions after you have read this consent information and click "I Agree."

Information obtained about you for this study will be kept confidential. The information from this research may be published for scientific purposes; however, your identity will not be given out.

I will not collect any personal information about you during the study. All study data will be stored securely and only accessed by study staff.

Questions

If you have questions about the research, you can contact the Principal Investigator at srirams@colorado.edu

If you have concerns or complaints about the research you can contact the CU Boulder IRB at (303) 735-3702 or <u>irbadmin@colorado.edu</u>:

02 October 2024