Interactive Robotics Learning: Implementing Face Tracking with Curio

Participant Information Sheet

Researcher: Talha Enes Ayranci (t.ayranci.1@research.gla.ac.uk)
1st Supervisor: Gerardo Aragon-Camarasa (Gerardo.AragonCamarasa@glasgow.ac.uk)
2nd Supervisor: Mireilla Bikanga Ada (Mireilla.BikangaAda@glasgow.ac.uk)

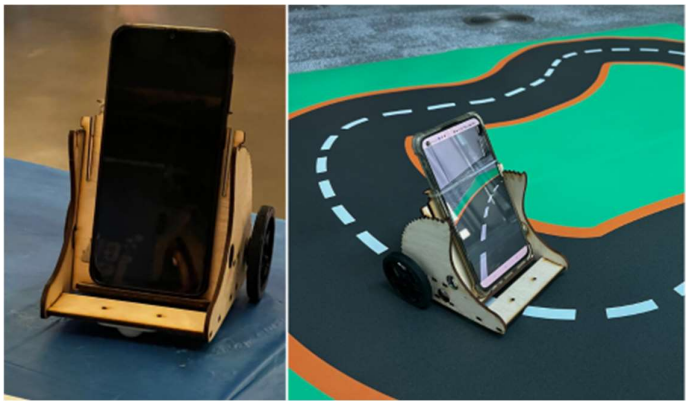
Curio
An Affordable Educational Platform

Dear Participant,

We invite you to participate in an experimental study and survey related to the title above. Before you decide, it's important to understand the purpose of this study and what your involvement would entail. Please read the following information carefully, and feel free to reach out if anything is unclear or if you would like further details. Take your time in making your decision and thank you for considering participating.

To participate in this study, you must be a researcher or student in Computing Science with basic knowledge of Python. Familiarity with computer vision concepts is helpful but not required.

What is the purpose of the study?



The purpose of this research is to explore how tangible, affordable mobile robotic tools impact learning and engagement for students and researchers in university-level computer science education, with a particular emphasis on machine learning concepts. By comparing outcomes related to engagement, motivation, and understanding, we aim to assess the effectiveness of these tools in enhancing educational experiences.

In this study, we will use the Curio robot, a unique two-wheeled mini vehicle that can be programmed and controlled via mobile devices through Bluetooth (visit trycurio.com). Curio is currently in the development phase and not available on the market.

What will happen to me if I take part?

The study setup includes a computer, smartphone, and the Curio robot. You won't need to bring any of them with you. During the study, you'll complete a coding task in which you fill in parts of a program that enables the Curio robot to track a face. The goal is for Curio to follow a face, adjusting its direction to keep the face centered on the camera screen.

The code you'll modify will be in a Jupyter notebook, where you'll edit one cell to achieve the desired outcome. A cheat sheet will be provided, allowing you to select the best options for reaching this goal. The entire session will last approximately one hour, including 10 minutes of familiarization, 40 minutes of activity, and a 10-minute survey.

Why Have I Been Chosen?

You were invited to participate in this study through various channels, such as emails, social media posts, or word of mouth, due to your background in Computing Science and relevant skills.

Do I Have to Take Part?

Participation in this study is entirely voluntary, and the survey is anonymous. If you choose to participate, you'll receive this information sheet for your reference and be asked to sign a consent form. However, since the survey is conducted online, your participation implies consent for your responses to be used in the study. You are free to withdraw from the study at any time without needing to provide a reason.

Will My Participation Be Kept Confidential?

The survey does not collect personal or sensitive information. Any information you choose to share will be kept strictly confidential and managed in line with the University's GDPR guidelines. Confidentiality will be preserved, and no third parties will have access to this data.

What Will Happen to the Results of the Survey?

No personal or sensitive information about you is collected. If the survey results are published, you will not be identified in any reports or publications.

Who Has Reviewed the Study?

This study has received approval from the College of Science and Engineering Ethics Committee at The University of Glasgow (Reference: 300230138).

Contact for Further Information

For further information please contact Talha Enes Ayranci: t.ayranci.1@research.gla.ac.uk

Thank you for participating in this study.