



Title: Calibrating Trust Towards an Autonomous Image Classifier

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Your Participation

This research is being conducted by Martin Ingram at the University of Glasgow, and supervised by Professor Frank Pollick, in collaboration with the London-based artificial intelligence firm Qumodo. You are invited to participate in this study, but before you do so you will be asked to read the following information to understand our study. Your participation is entirely voluntary, and if you have any questions regarding any element of the study, please feel free to contact either the researcher or the supervisor.

Do I Have to Take Part?

Your participation is entirely of your own choice, and you should feel no pressure to participate if you do not want to. Even if you decide to take part, you are well within your rights to cancel your involvement at any stage of the study, without having to give reason or justification.

The Study

If you decide to take part in this study you will be required to complete an image classification task, in which you will be asked to view a series of images that will be displayed to you in a singular consecutive fashion. You will see a series of images that contain animals, cars and foodstuffs, or everyday objects such as books and keys, and you will be simply asked to label the content of the image. During this task you will have assistance from an image classifier, AlexNet, a pretrained convolutional neural network which is capable of autonomously interpreting and labelling the contents of image files, which you will interact with through a Graphical User Interface (GUI), by using a keyboard and mouse. As you continue to use the image classifier, you will be asked to report your perceptions of the classifier's performance and the design of the GUI. You will also be asked to complete a few short questions regarding your perceptions towards technology. Taking part in the study should not take you any longer than 1 hour and 40 minutes. You will be offered payment for your participation at a rate of £6 per hour to compensate you for your time. It is unlikely that you will feel any discomfort, distress or unease by taking part in this study. However, if

you have any doubts following participation, please feel free to get in touch with either the researcher or supervisors to discuss this further. This study has received ethical clearance from the supervising researcher and the College of Science and Engineering Ethics Committee.

Your Information

All personal information you provide in this study will remain strictly confidential, and will be used solely for research purposes. Any responses will be stored in a manner that makes them anonymised and devoid of identifiable personal information. All paper data will be stored in a locked cabinet and all digital data will be password protected where stored electronically at the University of Glasgow. The only individuals with access to this information will be the researcher and supervisor mentioned above, and development staff of Qumodo.

Results

Any data collected from your participation in the experiment will be analysed in conjunction with data collected from other participants. We hope that this research will inform the design of interfaces and feedback systems for artificial intelligence and autonomous systems. When the study is completed, all participants are welcome to contact the researcher to receive access to a summary of the findings. Please feel free to get in touch with Martin Ingram or Professor Frank Pollick if you would like to gain further information about this study.