

## **Participant Information Sheet**

**Study Title:** Recognising Activities of African Wild Dogs using Machine Learning

**Researcher:** Rohan Bungre, Aran McConnell, Yue Kew, Charlie Steptoe  
**ERGO number:** 61647

You are being invited to take part in the above research study. To help you decide whether you would like to take part or not, it is important that you understand why the research is being done and what it will involve. Please read the information below carefully and ask questions if anything is not clear or you would like more information before you decide to take part in this research. You may like to discuss it with others but it is up to you to decide whether or not to take part. If you are happy to participate you will be asked to sign a consent form.

### **What is the research about?**

This research is part of a 4<sup>th</sup> year project for a group of Electronic Engineers and Computer Scientists. This project involves working with an external company, Mafic Ltd, who have been approached by the makers of a TV documentary on African Wild Dogs. They want to use a device attached to the dog's collar, giving accelerometer readouts, to understand the behaviour of the dogs. Using the readouts from the device and a Artificial Intelligence framework, different common activities of the dogs should be recognised and aid in understanding the behaviour of these dogs. The final aim of this product is to be able to monitor and understand the behaviour of African Wild Dogs better, and in a nonintrusive way. This has applications in the production of documentaries and in conservation.

To develop the Artificial Intelligence framework for this solution, we are using similar data from large domestic dogs to train the framework, as it is not possible to collect such data from African Wild Dogs. The behaviour of such large dogs should be similar enough to get a model of a reasonable accuracy. To train this model we need to collect data from domestic dogs, whilst carrying out basic tasks such as running, trotting, sleeping, grooming, and eating. The dogs must be filmed for data collection, so the data can be labelling to each activity later on.

### **Why have I been asked to participate?**

You have been asked to take part as you are an organisation or party that we believe may have access to dogs suitable for our research. You are also local to us, facilitating easier data collection.

### **What will happen to me if I take part?**

A small device will be attached to the collar of your dog, which will record some basic movement data. A camera will also be set up to film the dog for the whole process. Then you will be asked to encourage your dog to carry out a circuit of "behaviours", consisting of;

- Walking
- Trotting
- Sleeping
- Grooming
- Eating
- Galloping
- Barking

This circuit will then be repeated if time allows. If any activity is difficult to encourage it can be skipped. This whole activity can take as long as the participant is happy with, but the more activities that can be recorded, the better.

The video recording of the dog is essential to this project, and will be used to label the data from the device on the dogs collar.

### **Are there any benefits in my taking part?**

Taking part of this study will contribute data to a project which will develop a tool to help those producing wildlife documentaries, and conservationist carry out their work more effectively and with less disruption to African Wild Dogs.

**Are there any risks involved?**

No real risks identified.

**What data will be collected?**

Two main types of data will be collected. The device on the dogs collar will simply collect reads of the acceleration it experiences and the rotation it experiences. This will be stored securely on a server. We will also take a video of the dog performing the activities. This video can be designed to only show the dog if required.

**Will my participation be confidential?**

Your participation and the information we collect about you during the course of the research will be kept strictly confidential.

Only members of the research team and responsible members of the University of Southampton may be given access to data about you for monitoring purposes and/or to carry out an audit of the study to ensure that the research is complying with applicable regulations. Individuals from regulatory authorities (people who check that we are carrying out the study correctly) may require access to your data. All of these people have a duty to keep your information, as a research participant, strictly confidential.

The study itself will collect no identifiable data about the participants, other than a video of the participant's dog. This video will be stored securely on password protected laptops, or the University servers on their OneDrive.

Consent forms will be scanned and kept electronically in the same location as the videos. The originals will then be destroyed.

**Do I have to take part?**

No, it is entirely up to you to decide whether or not to take part. If you decide you want to take part, you will need to sign a consent form to show you have agreed to take part.

If you do not wish to take part, communicate this verbally and do not sign the associated consent form.

**What happens if I change my mind?**

You have the right to change your mind and withdraw at any time without giving a reason and without your participant rights being affected.

You must communicate this verbally to a researcher during the session, or by email before a session commences.

If you withdraw from the study, we will keep the information about you that we have already obtained for the purposes of achieving the objectives of the study only.

**What will happen to the results of the research?**

Your personal details will remain strictly confidential. Research findings made available in any reports or publications will not include information that can directly identify you without your specific consent.

Raw accelerometer data will be used to test and train a machine learning model, but contains no identifiable information at all. The project in general will be written up in an academic report as part of the completion of the Student's degrees. Video will be kept for the length of the project itself.

**Where can I get more information?**

Contact: Rohan Bungre ([rsb1g17@soton.ac.uk](mailto:rsb1g17@soton.ac.uk)),

Aran McConnell ([ajm2g17@soton.ac.uk](mailto:ajm2g17@soton.ac.uk)),

Yue Kew ([ysk2a15@soton.ac.uk](mailto:ysk2a15@soton.ac.uk)),

Charlie Steptoe ([cs5n17@soton.ac.uk](mailto:cs5n17@soton.ac.uk))

**What happens if there is a problem?**

If you have a concern about any aspect of this study, you should speak to the researchers who will do their best to answer your questions.

If you remain unhappy or have a complaint about any aspect of this study, please contact the University of Southampton Research Integrity and Governance Manager (023 8059 5058, [rgoinfo@soton.ac.uk](mailto:rgoinfo@soton.ac.uk)).

Contact: Rohan Bungre ([rsb1g17@soton.ac.uk](mailto:rsb1g17@soton.ac.uk)),  
Aran McConnell ([ajm2g17@soton.ac.uk](mailto:ajm2g17@soton.ac.uk)),  
Yue Kew ([ysk2a15@soton.ac.uk](mailto:ysk2a15@soton.ac.uk)),  
Charlie Steptoe ([cs5n17@soton.ac.uk](mailto:cs5n17@soton.ac.uk))

**Data Protection Privacy Notice**

The University of Southampton conducts research to the highest standards of research integrity. As a publicly-funded organisation, the University has to ensure that it is in the public interest when we use personally-identifiable information about people who have agreed to take part in research. This means that when you agree to take part in a research study, we will use information about you in the ways needed, and for the purposes specified, to conduct and complete the research project. Under data protection law, 'Personal data' means any information that relates to and is capable of identifying a living individual. The University's data protection policy governing the use of personal data by the University can be found on its website (<https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page>).

This Participant Information Sheet tells you what data will be collected for this project and whether this includes any personal data. Please ask the research team if you have any questions or are unclear what data is being collected about you.

Our privacy notice for research participants provides more information on how the University of Southampton collects and uses your personal data when you take part in one of our research projects and can be found at <http://www.southampton.ac.uk/assets/sharepoint/intranet/Is/Public/Research%20and%20Integrity%20Privacy%20Notice/Privacy%20Notice%20for%20Research%20Participants.pdf>

Any personal data we collect in this study will be used only for the purposes of carrying out our research and will be handled according to the University's policies in line with data protection law. If any personal data is used from which you can be identified directly, it will not be disclosed to anyone else without your consent unless the University of Southampton is required by law to disclose it.

Data protection law requires us to have a valid legal reason ('lawful basis') to process and use your Personal data. The lawful basis for processing personal information in this research study is for the performance of a task carried out in the public interest. Personal data collected for research will not be used for any other purpose.

For the purposes of data protection law, the University of Southampton is the 'Data Controller' for this study, which means that we are responsible for looking after your information and using it properly. The University of Southampton will keep identifiable information about you for 0 years after the study has finished after which time any link between you and your information will be removed.

To safeguard your rights, we will use the minimum personal data necessary to achieve our research study objectives. Your data protection rights – such as to access, change, or transfer such information - may be limited, however, in order for the research output to be reliable and accurate. The University will not do anything with your personal data that you would not reasonably expect.

If you have any questions about how your personal data is used, or wish to exercise any of your rights, please consult the University's data protection webpage (<https://www.southampton.ac.uk/legalservices/what-we-do/data-protection-and-foi.page>) where you can make a request using our online form. If you need further assistance, please contact the University's Data Protection Officer ([data.protection@soton.ac.uk](mailto:data.protection@soton.ac.uk)).

**Thank you for reading this information sheet and considering taking part in our study.**

