



The University of Edinburgh

Sensing Bodies: linking quantitative and qualitative data of air pollution exposure

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Information Sheet

Sensing Bodies: linking quantitative and qualitative data of air pollution exposure

I am a fourth-year Informatics Student at the University of Edinburgh. My supervisor is Professor D K Arvind in the School of Informatics. In conjunction with Dr. Emma Garnett, Centre for Speckled Computing of the School of Informatics, I am performing a pilot study of PHILAP in Edinburgh.

What is the purpose of this study?

We aim to develop an interdisciplinary methodological infrastructure for engaging with, moving between and presenting different kinds of data sets of air pollution.

Why have you been asked to take part?

You have been asked to take part in this study because you are a Computer Science student resident in Edinburgh.

How do I let the researcher know I want to take part?

Before you decide to take part it is important you understand why the research is being conducted and what it will involve. Please take time to read the following information carefully.

If you choose to take part in the study, you can sign the attached consent form. It ensures that you are aware of your rights and explains the extent of your participation.

What happens if you choose to take part?

You will be asked to wear 2 sensors during 2 periods of a normal daily routine: commuting from home to university and vice-versa. You will also be asked to observe and log information about air pollution and breathing sensations in the form of text, audio, photos or video clips. The 2 sensors you will wear are a RESpeck, used to collect data from your breathing and an AirSpeck, used to measure the particulate matter in the environment.

The RESpeck device should be placed below the left rib, encased in a small disposable plastic bag, with the flat, blue surface of the RESpeck against your skin before securing it with the medical tape provided. Please ensure the RESpeck device is the right way up, i.e., you can read the text on the flat side of the device. The AirSpeck is used externally as a belt around the waist.

You will be provided a phone connected to the sensors for data collection.

After the data collection, you will be interviewed by Dr. Emma Garnett about your experience of using the sensor and the data you generated, which will take place in a safe environment at a time that is convenient to you between the 15th and 18th October. We would like to audio record your responses and transcribe to text afterwards. The audio recording will be deleted after that.

At any point in time, if you feel that you do not wish to continue with the study, then please feel free to let me know and the study will be stopped immediately.

What are the potential risks and how have they been mitigated?

You'll be asked to wear a RESpeck device. This is a CE-marked device and as part of this process it has undergone the necessary safety tests. Participants with known plaster/plastic/dressing allergy will be excluded. The device is enclosed in a disposable plastic bag and is not in direct contact with the skin. The RESpeck device is cleaned and sterilised once returned. There are no significant risks involved in participating in this study.

How will my data be processed?

The data is anonymised and no personal information is stored on the computers. The storage and processing of your data complies with the new GDPR rule. Your data is only identified by your subject ID. Please refer to attached DPIA for further details on risk assessments.

Who can I contact?

If you have any further questions about the study, please contact João Catarino (s1512284@sms.ed.ac.uk) or the lead researcher, Professor D K Arvind (dka@inf.ed.ac.uk). In your communication, please provide the study title.