

Informed consent form for Fall detection

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Organization: InnoRenew CoE

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Project: Fall detection

This form has two sections. The first provides information about the study, explains how your data will be processed and used, and what are your rights. Please read it carefully and if there is anything you do not understand, ask for an explanation. The second section consists of a certificate of consent where you are asked to verify your agreement to participate by confirming 4 statements and signing the form.

About the organization

The study is organized by the InnoRenew CoE, a not-profit private research institute focused on wood modification and the use of renewable materials in sustainable building. It is funded by the Horizon 2020 Widespread Teaming Programme and supported by grants from the European Commission and the Republic of Slovenia.

Purpose of the research

The university UP-FAMNIT is working in collaboration with the institute InnoRenew CoE to develop a non-intrusive fall recognition system based on a smart floor that detects human activities through a matrix of pressure sensors. Falls are events that affect almost every aging human being above the age of 65. These incidents can have major consequences on the physical, psychological and socio-economical levels. The aim of the project is to successfully differentiate ordinal daily activities from the sudden fall event to provide immediate help and prevent further injuries.

Voluntary participation

Your participation in this research is entirely voluntary. You can withdraw from the study at any point without providing any reasons for doing so.

Procedures

The test is composed of the following eight events:

1. A forward fall on the knees

2. A forward fall with forward arm protection
3. A forward fall ending lying flat
4. A forward fall on the knees with rotation, ending in the lateral position
5. A lateral fall ending lying flat
6. A lateral fall ending lying flat with recovery
7. A forward fall ending lying flat with recovery
8. Walking on the floor

The first five events will be registered during a time window of 5s, and after the fall, the participant must hold the ending position until the notification. The position must be maintained as if a real debilitating fall occurred.

Risks and benefits

The simulation of fall events it's a serious process and must be conducted in the proper way to prevent injuries and as if a real dangerous fall occurred to ensure data quality. All the tests are supervised by our team members and shields for knees and elbows can be requested.

There will be no direct benefit to you, but your participation is likely to help us build a prediction model that will be used in smart floor setting.

You will not be provided with any incentive to take part in this activity.

Confidentiality

We will not share your personal information to anyone outside of the research team. Your real name will be removed in all publications and outputs. Any information about you will be marked by a number instead of your name. Only members of the research group will have access to personally identifiable data and all the information will be securely stored and destroyed when it is no longer needed.

Processing and storing your data

Anonymised research data will be deposited in the Zenodo open access repository where it will be available to other researchers in line with current data sharing practices.

Data Breach

In case of a data breach, the person responsible for data protection will be informed by the responsible researcher. Together they will undertake all steps necessary to minimize any negative consequences.

You will receive a notification about the nature of the Data Breach, the information lost and the actions taken as soon as possible.

Your rights

You have the right to access your personal data, to correct it, to erase it, to restrict its processing, the right to data portability, and the right to object to in accordance with Articles 15-22 of the General Data Protection Regulation (GDPR). However, the right of erasure does not apply when the processing is necessary for the purposes of archiving that is in public interest, as well as the purposes of statistical analysis and scientific or historical research.

You can also withdraw your consent to process your personal data at any time according to GDPR Article 6(1) and Article 9(2) without any consequences. Upon request your local supervisory authority will provide you information on exercising your rights according to Article 57(e) GDPR.

Usage of your data

Processed data will be used in research publications, for education purposes and for future research. The use will not be limited to the research group. Third parties will be able to access and process the anonymized data deposited on the Zenodo open research data platform.

As a participant you can receive a summary of the results upon request.

Contact information

If you have any questions about the content of the study, you can contact the principal researcher, Jernej Vičič, jernej.vicic@upr.si.

Certificate of consent

Please read the ten statements below and tick the boxes to confirm your agreement.

☐

I have read all sections in this information sheet.

☐

I have been given the opportunity to ask questions about the project.

☐

I understand my participation is voluntary, and I can withdraw at any time.

☐

I understand anonymised research data will be archived and may be used by third parties.

☐

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have asked were answered to my satisfaction. I consent voluntarily to be a participant in this study.

Print name of participant

Signature of participant

Date

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered appropriately and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and that consent has been given freely and voluntarily. A copy of this certificate of consent has been provided to the participant.

Print name of researcher

Signature of researcher

Date