

Dear volunteer,

**thank you for deciding to participate in this study
about**

activity recognition.



Details about Study

Aim of Study

The aim of this study is the recognition of activities in daily life by using kinematic data (linear acceleration and angular velocity).

Data Acquisition

In this study four inertial measurement unit sensors manufactured by SHIMMER are used. Each of them consists of one 3-D accelerometer and one 3-D gyroscope. These sensors are placed

- at the chest by a closed-fitting shirt
- at the hip by a clip
- at the ankle by a special shoe
- at the wrist by a strap.

After the initialization of the sensors you have to perform the following different activities in a supervised manner:

- sitting, lying, standing
- washing dishes, vacuuming, sweeping
- walking
- ascending stairs, descending stairs
- riding in a car
- treadmill (5.6 km/h, 8.3 km/h)
- bicycling (50 watt, 100 watt)
- rope jumping.

These activities will be performed in the Haberstrasse 2, Martensstrasse 3 and the Institute for Sport Science and Sports (Erlangen). The whole study will take about **90 minutes**. Of course the participation is voluntary. You can cancel the acquisition at any time. If you want, we delete your data.

Profile of Subject

Surname	_____
First name	_____
Street	_____
ZIP / City	_____
Telephone	_____
E-mail	_____

Date of birth	_____
Sex	<input type="checkbox"/> male <input type="checkbox"/> female
Body height [cm]	_____
Body weight [kg]	_____
Size of shoe [EUR]	_____
Dress size [S, M, L, XL]	_____
Chest width [cm]	_____
Handedness	<input type="checkbox"/> left <input type="checkbox"/> right

Physical Activity Readiness Questionnaire (PAR-Q)

For most people, physical activity should not pose any problem or hazard. The PAR-Q is designed to identify the small number of adults for whom physical activity might be inappropriate or those who should seek medical advice concerning the type of activity most suitable for them.

1. Do you have a bone or joint problem such as arthritis, which has been aggravated by exercise or might be made worse with exercise?	Y / N
2. Do you have or ever suffered a heart condition?	Y / N
3. Have you ever felt pain in your chest when you do physical exercise?	Y / N
4. Is your doctor currently prescribing you drugs or medication?	Y / N
5. Have you ever suffered from shortness of breath at rest or with mild exercise?	Y / N
6. Do you ever feel faint, have spells of dizziness or have ever lost consciousness?	Y / N
7. Do you know of any other reason why you should not participate in a program of physical activity?	Y / N

If you answered NO to all questions:

If you answered the PAR-Q honestly and accurately, you have reasonable assurance of your present suitability for participating in the study about activity recognition.

Assumption of Risk

I hereby state that I have read, understood and answered honestly the questions above. I also state that I wish to participate in all the activities mentioned in *details about study*. I realize that my participation in these activities involve the risk of injury. I hereby confirm that I am voluntarily engaging in an acceptable level of activity, which has been recommended to me.

In addition

All of my additional questions were answered to my complete satisfaction.

On the part of the university no insurance protection exists for the participant.

Erlangen, the _____	Signature of participant _____
Erlangen, the _____	Signature of advisor _____

Agreement for Participation in the Study

With your signature you confirm the following statements:

- The content of the study was completely explained to me.
- I read and understood the section *details about study*.
- All of my additional questions were answered so that I was completely satisfied.
- I agree to participate in the mentioned study.
- The participation in the study is voluntarily.
- I know that I can cancel the agreement for participation at any time.

Data protection statement:

I hereby agree that the acquired data and the personal data can be used for scientific research. The acquired data will be treated in an anonymous manner (i.e. the mapping to your name is only possible with utilities like a reference list). The acquired data can be used for

- this study
- further studies or publications.

The acquired data can be disclosed to third parties in an anonymous manner. The agreement can be canceled at any time and without the specification of reasons.

Erlangen, the _____	Signature of participant _____
Erlangen, the _____	Signature of advisor _____

Withdrawal of the agreement for data usage:

I know that I can withdraw my agreement for data usage at any time and without any reason.

In case of withdrawal, I agree that the data will be saved for control purposes.

I have the right to demand deletion.

I know that, in case of anonymous storage, the requested deletion of the data is not possible.

Erlangen, the _____	Signature of participant _____
Erlangen, the _____	Signature of advisor _____