## Jožef Stefan Institute, Ljubljana, Slovenia

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# **TECHNOLOGY** OFFER

#### Detection of phoning while driving

System for Detecting a Person Driving a Vehicle while Using a Mobile Computing Device

Slovenian researchers have invented a solution for detecting a person driving a vehicle while using a mobile computing device by making use of sensor data provided by mobile computing device. Researchers are looking for companies interested in further development of the commercial application and commercialization of the invention.

The system for detecting a person driving a vehicle while using a mobile computing device is a patented solution. The solution aims at helping governments and private interested organizations in restricting mobile phone use while driving which is a well know road safety concern.

A system for detecting a person driving a vehicle while using a mobile computing device is based on the detection of movement patterns being attributable to a movement of a vehicle and movement patterns being attributable to a person using the mobile computing device. A relation is established between both movement patterns and based on their relation it is determined whether a person is driving a vehicle while using a mobile computing device.

#### Advantages of the invention

#### In contrast to other solutions

- Completely autonomous solution (only smart phone is needed);

Employment of context-based reasoning methods enables more reliable and more robust detection whether a person is driving a vehicle while using a mobile computing device;
observing a relation of vehicle movement patterns and movement patterns of a person using a smart phone is a novel approach.

#### The inventors

The inventors are internationally recognized experts in the fields of ambient intelligence, machine learning and data mining, language and speech technologies, computational intelligence and agent and multiagent systems.

The authors have experience in a wide range of ambient intelligence tasks, for example:

- Smart home applications focused on energy efficiency, security and ease of use
- Activity recognition (lying, sitting, standing, walking, running, cycling, etc.)
- Detection of unusual behaviour caused by health or security issues
- Fall detection
- Recognition of diseases
- Human energy expenditure estimation
- Detection of unusual environmental events

#### Intellectual property

Patent applied for but not yet granted.

#### Stage of development

The proposed methods have been tested. The technology is ready for prototype development, integration and proof of concept testing.

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# Target sectors for commercialization / application

We are looking for: - Partners for further development and commercialization of the invention.

#### - Companies with good contacts and business

- orientation in transportation safety;
- Mobile computing industry and
- telecommunication service providers
- Governmental road safety organizations;
- Insurance companies;
- Automotive industry.

#### **CONTACT DETAILS**

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