

Front Environment Recognition of Personal Vehicle using the Image Sensor and Acceleration Sensors for Everyday Computing

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In this research, we propose the method for detecting moving objects in front of the Segway by detecting running state for the Segway. Running state of the personal vehicle Segway is detected with both an image sensor and an acceleration sensor mounted on the Segway. When objects are moving in front of the Segway, the image sensor can capture the motion while the acceleration sensor shows a different result. By analyzing the difference our method successfully recognizes moving objects from environment.

Keywords: Segway, Image Sensor, Acceleration Sensor, Optical Flow.