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Abnormality Detection of Persons Living Alone Using Daily Life Patterns Obtained from Sensors

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Abstract : In this research, the goal was construction of a system by which multiple sensors were used to observe the daily life behavior of persons living alone (while respecting their privacy). Using this information to judge such conditions as a bad physical condition or falling in the home, etc., so that these abnormal conditions can be made known to relatives and third parties. The daily life patterns of persons living alone are expressed by the number of responses of sensors each time that a set time period has elapsed. By comparing data for the prior two weeks, it was possible to judge a situation as 'normal' when the person was in a good physical condition or as 'abnormal' when the person was in a bad physical condition.

Keywords : sensors, elderly living alone, abnormality detection, iifestyle habit
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