

## **Development of active evacuation system in individual household using earthquake early warning Part 1. Outline of the system**

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We propose a seismic alert system monitoring the structural capacity of individual house and recognizing automatically the indoor risky space with computer vision as an application of the earthquake early warning. In the part 1 we elaborate the diagnosis method, which is based on the microtremors of building, applicable for seismic alert system that caution about the structural capacity of houses and the probability of death to the inhabitants. Add to the predominant period of building, the diagnosis becomes more refined method by paying attention to some indices as damping factor and complexity of vibration which can be quantified through the chaos analysis.