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User Action and Facial Expression Recognition for Error Detection System in an Ambient Assisted Environment

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Highlights

- A new method for abnormal behaviors detection using facial expressions is proposed,
- Optimized Convolutional Neural Network is proposed for facial expression recognition,
- A new method for user actions recognition using Radio Frequency Identification tags,
- Obtained results on several benchmark datasets attest of our system's efficiency,
- Conducted experiments in a testing smart home reveal the effectiveness of our system.

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