

**CALL FOR PAPERS:
J-BHI Special Issue on
“Ambient Intelligence and Assistive Technologies
for Cognitive Impaired People”**

Neurodegenerative diseases are progressive and difficult to diagnose in their early stages. Progressive impairment in the activities of daily living, as well as cognitive deterioration, leads to an increase in patient dependency. Neuropsychiatric symptoms are common features and include psychosis (delusions and hallucinations), depressive mood, anxiety, irritability/lability, apathy, euphoria, disinhibition, agitation/aggression, aberrant motor activities, sleep disturbance, and eating disorders. Additionally, they have a tendency to wander and misplace objects in their environment. Therefore, cognitive impaired patients need constant monitoring to ensure their wellbeing and that they do not harm themselves.

Ambient Intelligence (AmI) is the computing paradigm that can provide support both for cognitive impaired people within their domestic environments and for clinicians to collect data needed to assess the disease. A novel class of applications can potentially emerge from the specialization of AmI technologies to the special domain of cognitive impaired users. However, such applications must be able to deal with peculiarities due to irrational and abnormal behaviors of cognitive impaired people within their environments, and their general attitude to not accepting wearable technologies.

This special issue aims at reporting the state of the art regarding the realization of effective, intelligent, secure, and reliable AmI applications for the support of cognitive impaired people. We invite authors to submit their original papers and contributions addressing (but not limited to) the following topics:

- Non-invasive sensing and monitoring
- Action identification and behavior analysis
- Context-Awareness in environments with cognitive impaired users
- Interaction mechanisms and multimedia technologies for cognitive impaired users
- Cognitive Assistance
- AmI applications for training and rehabilitation of cognitive impaired people
- Safety assurance
- Security and privacy issues
- AmI Applications for cognitive impaired user

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SUBMISSION OF MANUSCRIPTS

Manuscripts must be prepared according to the format of the IEEE Transactions (bme.ee.cuhk.edu.hk/TITB/instr4authors.html) and electronically submitted through the web-based Manuscript Central (embs-ieee.manuscriptcentral.com/). When submitting, authors are requested to **choose** “Ambient Intelligence and Assistive Technologies for Cognitive Impaired People” in the manuscript type to indicate that the paper is intended for this special issue.

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For any further questions, please contact the Guest Editors or the Editor-in-Chief.