EDITORIAL

Editorial

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This third issue of the sixth volume of the Journal of Reliable Intelligent Environments includes four papers.

Embodiment matters: toward culture-specific robotized counselling, by Fulvio Frati et al., focuses on human–robot interaction in a home environment and presents an approach that takes into account socio-cultural elements such as those characterizing the Japanese culture. In this paper, indeed, authors discuss the integration of a robot with the traditional Japanese nodding behavior. An experimentation has been performed by involving ten subjects and quantitative evaluation was based on the classic metrics of utterance, adapted to support the Japanese language.

An IoT based building health monitoring system supported by cloud, by Debajyoti Misra, Gautam Das and Debaprasad Das, proposes a smart building health monitoring system that aims at avoiding some mishaps. This paper adopts the internet of things (IoT) technology to realize a structural health monitoring system for civil infrastructures. The system comprises a variety of sensors and technologies such as piezoelectric sensors, Arduino and ESP8266 Wi-Fi modules. Moreover, the system adopts a cloud infrastructure to store and analyze data.

Deployment of sensor nodes for aquaculture in western Godavari delta: results, challenges and issues, by Zeenat Shareef and S. R. N. Reddy, concerns the design and development of a real-time water quality monitoring infrastructure for aquaculture ponds. The sensor infrastructure consists of several nodes to measure water pH, dissolved oxygen, water temperature, atmospheric temperature, and pressure. Data are stored and analyzed to generate alerts on physicochemical parameters, which are successively made available to the farmers through a specific mobile application. The framework has been deployed in two testbeds. The lesson learned from deploying these technology in a quite hard scenario like the delta of a large river is finally reported.

Design and development of IoT-based latency-optimized augmented reality framework in home automation and telemetry for smart lifestyle, by Ayaskanta Mishra, Sayan Karmakar, Ankush Bose and Ankita Dutta, proposes the integration between Augmented Reality and IoT to provide the end user with a new AR UX in smart home applications. A complete system prototype has been designed and developed to recognize interactive objects, like light, fan, and air-conditioner, and give their controls live on a 3D framework. The target object is trained preliminary to recognize the type of home appliance to support with an AR control panel with preconfigured options of device control and sensor data visualization.

We hope these articles stimulate the community to further improvements in this area and perhaps to collaborations between the participating teams so that complementary solutions can be used in a combined way to tackle more complex problems.

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