Editorial

We are pleased to release the third issue of the **International Journal of Web Applications** with the following papers.

In the first paper, "**A Low Energy FPGA-based Wireless Sensor Node for Real-Time Event Driven Control with Hardware Only Architecture**", the authors outlined a low-energy FPGA-based wireless sensor node designed for real-time event-based control(EBC) systems, eliminating the need for microcontrollers or software components. The node employs a TDMAcommunication scheme for precise timing and low jitter, featuring a low-power section that continuouslysamples and filters sensor data. The prototype was tested in a closed-loop temperature controlsystem, demonstrating effective performance with minimal transmissions.

In the paper "**Predictable Real-Time Task Migration for Heterogeneous Many-Core Systems with Composable Architectures**," the authors presented a novel approach to enable the migration of challenging real-time tasks in composable many-core systems, addressing dynamic events such as thermal hotspots or faults.Experimental results on heterogeneous many-core platforms show that the proposed method achieves significantly higher success rates in thermal management scenarios compared to state-of-the-art mapping reconfiguration.

In the last paper, "**Challenges and Opportunities in Real-Time Systems for Industry 4.0: Towards Adaptive and Predictable Resource Management**", the authors outlined the emerging challenges in real-time systems, particularly within the context of Industry 4.0 and cyber-physical systems, where dynamic and unpredictable workloads complicate resource management. This paper lays the groundwork for future research into composable, predictable, and efficient real-time systems that can handle the evolving demands of industrial and embedded applications.

We will bring more research in the next issue.

Editors