## Low-Cost Fog Edge Computing for Smart Power Management and Home Automation

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**Abstract :** The Internet of Things (IoT) is an unprecedented creation. Electronics objects are now able to interact, share, respond and adapt to their environment on a much larger basis. Actual spread of these modern means of connectivity and solutions with high data volume exchange are affecting our ways of life. Accommodation is becoming an intelligent living space, not only suited to the people circumstances and desires, but also to systems constraints to make daily life simpler, cheaper, increase possibilities and achieve a higher level of services and luxury. In this paper we are as Internet access, teleworking, consumption monitoring, information search, etc.). This paper addresses the design and integration of a smart home, it also purposes an IoT solution that allows smart power consumption based on measurements from power-grid and deep learning analysis.

Keywords : array sensors, IoT, power grid, FPGA, embedded

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