

# The Future of Electronics: Silicon to Cloud Technologies

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## **ABSTRACT**

We will present and discuss some of the great research challenges and opportunities related to 21st century energy efficient computing and sensing devices and systems, in the context of the Internet of Things (IoT) revolution. In the future, major innovations will require holistic approaches encompassing silicon and cloud technologies. There is still an important role to be played by innovations in energy efficient technologies, devices, and system design, building on the success of silicon CMOS. Electronic and optoelectronic technologies may co-exists and boost the performance of future systems performing computing, sensing and communications in a new ecosystem centered on big/abundant data.