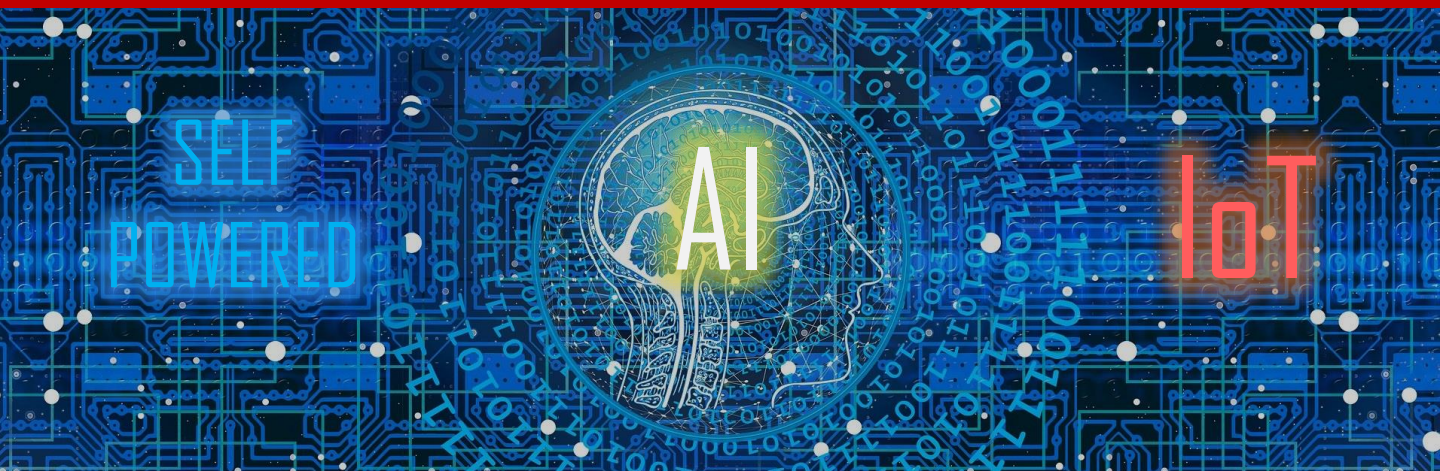


## Self-Powered AIoT Systems



The combination of IoT for sensing and aggregation of data from the surroundings and AI for analysis and decision making will expand the cyber-physical intelligence towards achieving complete autonomy. However, as the deployment of the sensors become increasingly ubiquitous, there will be massive amount of sensor data aggregation and analyses for autonomous decision making capabilities of AIoT products. This calls for substantial research and product development in self-powered technologies such as energy harvesters, super capacitors, energy storage devices at the energy generation and storage side and energy efficient technologies such as ULP microcontrollers, ULP microprocessors, ULP smart sensors and actuators at the energy consumption side. The proposed book focuses on the design principles of building these self-powered AIoT applications and their subsequent deployment. The vision of this book is to disseminate knowledge and key research findings that are essential to build total autonomous systems.

### Indicative Themes for chapters

#### 1. Concept of IOT

Introduction to AIoT, Need for AI in Edge computing, Trends in Distributed computing, Integration of AI in SOCs, Overview of convergence of AI in IoT.

#### 2. Concept of self-powered systems

Powering ULP devices by Energy harvesting, Powering Data Centers using renewables, Self powered sensors and actuators, IOT protocols and architecture for energy efficiency and energy harvesting

#### 3. AIoT Enabling technologies

Edge computing devices, Energy storage and energy management for edge computing, AI in edge computing, Trends in AI based ULP microprocessors and microcontrollers, Integration of AI in cyber physical domain

#### 4. AIoT applications

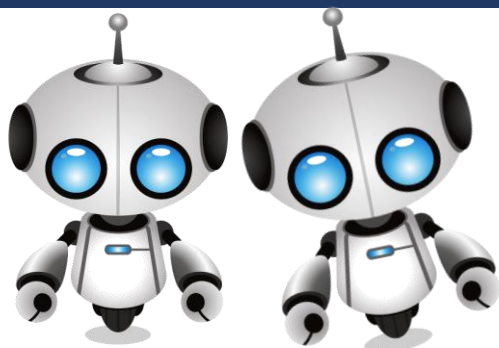
Case studies-AIoT Implementation - opportunities and challenges, Economics and business viabilities of AIoT Implementation, Business models for AIoT implementation, AIoT integration with business intelligence and Block chain

### Call for Abstracts

Max. length : About 250 - 500 words

Last date of submission of Abstracts : 15 May 2021

How to submit: <https://easychair.org/conferences/?conf=spaiot2021>



### Editors



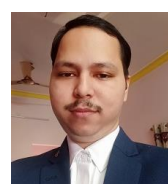
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