

Joint Chapter of CAS/ED Societies Presents
Webinar on
Power Management in Wearable Devices

On 7th April 2021

By: Dr. Mohammed Arifuddin Sohel,
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Abstract: This webinar reviews state-of-the-art methods of energy harvesting for implantable and wearable devices based on the energy sources in and around the human body. The development of a compatible and sustainable power supply for wearable and implantable devices is a demand to realize their continuous and high-performance operation, minimize the need for external energy sources, and increase the lifetime of the devices. Over the past decades, researchers focus on developing techniques to integrate energy harvesters with implantable and wearable electronics. Therefore, energy requirement for wearable and implantable devices, available energy level from the human body, and convenience and feasibility of the implementation are taken into account to provide full or partial power support. This talk aims to present recent findings and developments in the field of energy harvesting from thermoelectric, photovoltaic, piezoelectric, electromagnetic harvesters. Further the design of an Integrated DC-DC boost boost convertor and its operational challenges will also be discussed.



Dr. Mohammed Arifuddin Sohel is serving as the Secretary of IEEE Hyderabad Section and Chair of IEEE Robotics and Automation Society. He is working as Professor and Head of Electronics and Communication Engineering Department of Muffakham Jah College of Engineering and Technology, Banjara Hills, Hyderabad. He Completed his B.E (ECE) from Muffakham Jah College of Engineering and Technology in 2001 and M.E in Microelectronics Engineering from RMIT University in Melbourne, Australia in 2004 and Ph.D from JNTU Hyderabad in 2015. His research interests are in Analog and Mixed signal VLSI Design, Internet of Things, Machine Learning, Quantum Computing and Robotics. He has over 20 conference and journal publications to his credit.

Dr. Arif is a Senior member of IEEE and a recipient of IEEE Outstanding Branch Counselor Award for 2019. He was instrumental in organising Five IEEE international Conferences - PrimeAsia 2012 at BITS Hyderabad, PrimeAsia 2013 at GITAM Vizag, PrimeAsia 2015 at Vasavi Hyderabad, ICITE 2018 Osmania University and MOS AK 2019 at IIT Hyderabad.

Registration Details

7 April 2021

Webinar Timings: 5.30 PM to 6.30PM

Registration: Registration is mandatory for the webinar. Please register at following link

For further details contact:

Dr. P. Chandrasekhar, Chair, IEEE CAS/ED Chapter, Hyderabad Section.