



Seminars

Introduction to Low Power Wireless Biopotential Sensor Design

Abstract: Biopotential signals acquisition plays a critical role in a human-computer interface system. Most of these biopotential signals are distributed in the band lower than kilo-Hertz, or even lower than hundreds Hertz. Precise acquisition of low amplitude signal at near DC frequency band is a challenge. In addition, the wearable/implantable scenario raises a high requirement for power efficiency, which causes a very limited power budget for the typically power-hungry wireless data transmission. The existing commercial solutions, such as BLE and/or WiFi, are not suitable. This seminar introduces several System-on-Chip (SoC) key technologies for the wireless acquisition of biopotential signals.

Speaker: Milin Zhang



Milin Zhang is an associate professor in the Department of Electronic Engineering, at Tsinghua University. She received her B.S. and M.S. degrees in electronic engineering from Tsinghua University, Beijing, China, in 2004 and 2006, respectively, and her Ph.D. degree in the Electronic and Computer Engineering Department, Hong Kong University of Science and Technology (HKUST), Hong Kong. After finishing her doctoral studies, she worked as a postdoctoral researcher at the University of Pennsylvania (UPenn). She joined Tsinghua University in 2016. Her research interests include designing various non-traditional imaging sensors and biomedical sensing circuits, system design, and applications. She serves and has served as AE of TCAS-II, TBioCAS, TPC member of ISSCC, CASS, CICC, A-SSCC, and BioCAS. She is the Chapter chair of the SSCS Beijing chapter.