Advanced Engineering Course

Energy-Constrained Integrated Systems

National University of Singapore

December 10-14, 2018

Massimo Alioto, NUS

System-Level (Over)View, Fundamental Tradeoffs, Verticals
Ultra-Low Power and Adaptive Digital Techniques – parts I and II

Eduard Alarcon, UPC

Co-Design Methodologies and Design Space Exploration
System-Wide Adaptive On-Chip Power Management

Bogdan Staszewski, UCD

Low-Energy Wireless Communications and Transceivers – parts I and II
System-Wide Adaptive On-Chip Power Management

Boris Murmann, Stanford

Low-Power, Information-Preserving Analog Interfaces – parts I and II

Hoi-Jun Yoo, KAIST

On-Chip Data Analytics and Machine Learning – parts I and II
Case Studies of Energy-Constrained Systems: Wearables, Biomedical

Jan Rabaey, UCBerkeley

Distributed Sensors platforms and Energy-Centric System Optimization – parts I and II
Case Studies of Energy-Constrained Systems: IoT, Swarms

Regular registration: USD 2,000
PhD student registration: USD 750

Details on the course and the logistics are available at: http://mead.ch

INVITATION TO ATTEND THE NEW COURSE ON "ENERGY-CONSTRAINED INTEGRATED SYSTEMS"

Dear colleagues and friends,

We are very excited to share that the prestigious MEAD Education courses now include a brand new course on "Energy-Constrained Integrated Systems". The course will be held in the wonderful Singapore on December 10th-14th, 2018, at the National University of Singapore (NUS) campus.

WHY AND WHO SHOULD ATTEND

This intensive course provides a broad and solid coverage of the challenges and cutting-edge solutions to design integrated circuits under a tight energy/power budget (e.g., embedded AI, IoT, biomedical, wearables, and others).

At the same time, some lectures are dedicated to in-depth understanding of state-of-the-art techniques to reduce the consumption of major sub-systems, including analog/data converters, power management, digital, wireless communications, on-chip machine learning, related design methodologies, and several case studies based on silicon demonstrations.

The course organization makes it very well suited for engineers, designers from industry and researchers from academia who want to quickly master the fundamentals, gain a deep insight into the state of the art, and learn new and advanced design techniques for next-generation integrated systems with extremely low consumption.

BENEFITS AND VALUE

The speakers are world-renowned leaders in the areas covered by the course, who are glad to share their expertise and knowledge in an interactive manner.

The pragmatic teaching style aims to build up knowledge quickly and effectively, introducing case studies to exemplify the fundamental concepts and highlight the practical implications.

INFORMATION

For further information, feel free to contact MEAD Education (Caroline Huber, education@mead.ch), Prof. Massimo Alioto (malioto@ieee.org), and Prof. Eduard Alarcon (eduard.alarcon@upc.edu). Feel free to visit the following website: http://mead.ch/MEADNEW/Courses/singapore/

We really look forward to seeing you in Singapore and sharing the exciting experience of this new course. With our best wishes

Massimo Alioto and Eduard Alarcon