

**5 июня (понедельник) в 14.00 в аудитории 462 II учебного корпуса состоится лекция доктора Йен-Куанг Чен (Intel Corporation, USA).**



**5 июня (понедельник) в 14.00 в аудитории 462 II учебного корпуса состоится лекция доктора Йен-Куанг Чен (Intel Corporation, USA) на тему:**

**«System Challenges and Opportunities of Internet of Things»**

**Abstract:** This lecture aims to discuss the technical trends and system-level challenges of Internet of Things. Rapid advancement of networking technologies together with extreme miniaturization of computing and communication devices enable a host of new and exciting applications and services that connect the physical and the computational worlds. In the future, digital sensing, communication, and processing capabilities will be ubiquitously embedded into everyday objects, turning them into the Internet of Things (IoT). In this new paradigm, smart devices will collect data, relay the information or context to each other, and process the information collaboratively using cloud computing and similar technologies. This paradigm shift creates numerous challenges and opportunities for engineering. For example, in the future, enormous numbers of sensors will be deployed. The costs of servicing such sensors will be a major concern. It is often almost impossible to replace sensor batteries once they are in the field. Therefore, one major challenge is low power sensor design, or designs which do not require a battery change over the lifetime of the sensor. For example, if a sensor is deployed on an animal for tracking purposes, the battery of the

sensor should outlive the animal. This creates a demand for energy-efficient designs. This seminar will discuss the challenges and opportunities of Internet of Things.

**Biography:** Dr. Yen-Kuang Chen is a Principal Engineer at Intel Corporation. His research areas span from emerging applications that can utilize the true potential of internet of things to computer architecture that can embrace emerging applications. He has 60+ US patents, 20+ pending patent applications, and near 100 technical publications. He is one of the key contributors to Supplemental Streaming SIMD Extension 3 and Advanced Vector Extension in Intel microprocessors. He has served as a program committee member of 50+ international conferences on Internet of Things, multimedia, video communication, image processing, VLSI circuits and systems, parallel processing, and software optimization. He is a steering committee member of IEEE Internet of Things Journal, the past-chair of Internet of Things special interest group of IEEE Signal Processing Society, and the Editor-in-Chief of IEEE Journal on Emerging and Selected Topics in Circuits and Systems. He received his Ph.D. degree from Princeton University and is an IEEE Fellow. Dr. Yen-Kuang Chen is a member of the IEEE CAS Distinguished Lecturer Program, 2016-2017.

**Приглашаются все желающие!!!**