



IEEE Systems Council Chapter presents IEEE Distinguished
Lecture Series on

Tackling the End of Scaling in the 5G Era: 3-Dimensional Integrated Circuits and Gate-all-around FETs

Professor Taigon Song

Date: August 9, 2019 (Friday)

Time: 1:00 – 2:00 PM

Location: VEC 424, CSULB



Abstract:

“5G” is a hot keyword that is asking us engineers to build faster systems for communications. Algorithms are one that needs a revolutionary breakthrough, but hardware these days are asking for our unprecedented attention due to the fundamental improvements asked in 5G. In this talk, we will discuss two promising technologies in hardware that are considered as “fundamental improvements.” 3-dimensional integrated circuits (3D ICs) is a technology that stacks dies on the top of each other by using vertical interconnect technology such as through-silicon vias (TSVs) and monolithic inter-tier vias (MIVs). Another key technology in this talk is a new device technology called gate-all-around FETs. We will discuss what are the impacts the VLSI industry when these new devices are introduced to designs.

About Speaker:

Professor Taigon Song received the B.S. degree in Electrical Engineering at Yonsei University in Seoul, Korea, in 2007; the M.S. degree in Electrical Engineering from the Korea Advanced Institute of Science and Technology (KAIST) in Daejeon, Korea, in 2009; and the Ph.D. degree from the School of Electrical and Computer Engineering, at the Georgia Institute of Technology, Atlanta, GA, USA, in 2015.

He joined the School of Electronics Engineering at Kyungpook National University (KNU), Daegu, South Korea, as an Assistant Professor, in 2019. Prior to joining KNU, he was an R&D engineer at Synopsys Inc., intern at Synopsys Inc. and Cadence Design Systems, and an electromagnetic interference (EMI) engineer in the on-line electric vehicle (OLEV) business department at KAIST.

For more information, please contact: Prof. Sean Kwon at sean.kwon@csulb.edu