

SEMINAR ANNOUNCEMENT

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
COLLEGE OF DESIGN AND ENGINEERING
Website: <https://cde.nus.edu.sg/ece>

Area: Integrated Circuits & Embedded Systems (ICES)

Host: Professor Massimo Alioto

Research Seminar

TOPIC	:	A holistic approach to processing in memory: From device to system
SPEAKER	:	Professor Vijaykrishnan Narayanan The Pennsylvania State University, USA
DATE	:	Monday, 6 April 2026
TIME	:	10AM to 11AM
VENUE	:	Block E7, E7-03-09 - Seminar Room 4

ABSTRACT

There has been a dramatic increase in data-centric workloads such as machine learning, medical analytics and personalized medicine. This talk will highlight processing in memory and fabric attached memories that enhance the efficiency of these critical memory-centric workloads. This talk will highlight efforts to incorporate computing in or near the SRAM caches, DRAM memories, and especially advances in Ferroelectric non-volatile memory architectures. The talk will focus on the interaction across the different layers of the design stack.

BIOGRAPHY



Vijaykrishnan Narayanan is an Evan Pugh University Professor and Robert A Noll Chair Professor of Computer Science and Engineering and Electrical Engineering at The Pennsylvania State University. His research interests are Computer Architecture, Design Automation and Design with Emerging Technologies. He is a Fellow of IEEE, ACM, AAAS and National Academy of Inventors. He serves on ACM SIGDA Executive Committee and as Associate Editor-in-Chief of IEEE Micro. He has served as founding co-editor-in-chief of ACM JETC and as editor-in-chief of IEEE TCAD.