



# IEEE CASS Summer School

## Advanced Research on Near/In-Memory Computing

Hangzhou, China  
August 28, 2024

### ► INTRODUCTION

Near/In-memory computing technologies aim to develop emerging computing architectures for the post-Moore era, seeking to overcome the computational limitations of chips and drive innovation in the semiconductor field. To advance the development of near/in-memory computing technologies, the IEEE Circuits and Systems Society (IEEE CASS), the International Innovation Institute of Beihang University (Beihang University International Innovation Institute), and Universiti Putra Malaysia have jointly established a summer course titled “Advanced Research on Near/In-Memory Computing Technologies”. This course employs a combination of academic seminars and lectures to provide an in-depth exploration of the fundamental theories, system architectures, algorithm designs, and the latest advancements and future trends in near/in-memory computing technologies. By participating in this summer course, attendees are expected to lay a solid foundation for conducting high-level research and addressing practical engineering challenges.

### ► INVITED



#### Jose M. de la Rosa

IEEE Fellow, IEEE TCAS-I EIC, Institute of Microelectronics of Seville

AI-empowered Design of Analog-to-Digital Converters



#### Yongpan Liu

Professor, Tsinghua University

Near/In-Memory Computing: A Systematic Approach



#### Weiqiang Liu

Professor, Nanjing University of Aeronautics and Astronautics

In-Memory Hyperdimensional Computing: Algorithms, Circuits and Applications



#### Guangyu Sun

Associate Professor, Peking University

Advanced Architecture Research on Near/In-Memory Computing



#### Zhou Jin

Associate Professor, China University of Petroleum

ReRAM-based Processing-in-Memory Accelerator for Scientific Computing

### ► Registration Method

Registration Link: <https://s.31url.cn/8mCjvC0k>



All attendees must register in advance. Please click the link or scan the QR code to register:

### ► Organizer

Hangzhou International Innovation Institute,  
Beihang University

### ► Address

166 Shuanghonggiao Street, Pingyao Town,  
Yuhang District, Hangzhou, China