

Alternate technologies for SRAM

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Following technology advances in high-performance computation systems and the fast growth of data acquisition, machine learning, especially deep learning, made remarkable success in many research areas and applications. The deployment of such a big model, however, is both computation-intensive and memory-intensive. This module of the short course will focus on the alternative technologies for SRAM. We will survey emerging non-volatile memories for on-chip data storage, logic operation, and computing. We will also discuss how to improve the execution efficiency, system robustness, and design scalability through holistic co-design across devices, circuits, and algorithm levels.

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