

Signal and Information Processing for Computing Systems

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Abstract — We present an overview of new technologies for signal and information processing, with emphasis on applications to computing and information technology systems. We will discuss new scenarios for visual information processing, new kinds of user interfaces, and advances in speech and language processing. Many of those technologies are enabled by developments in new computing architectures, streaming data processing, and deep neural networks, all related to the rapid growth in new technologies for the efficient communication, storage, and analytics on big data. By combining advances in computing and signal processing and related areas, computing devices and cloud systems can now deliver new and enhanced user experiences.)