Description:
Research in information, communications and signal processing has brought about new services, applications and functions in a large number of fields which include consumer electronics, biomedical devices and defence. These applications play an important role in advancing technologies to enhance human life in general.

Recent Advances in Information, Communications and Signal Processing aims to give students, researchers, and engineers information pertaining to recent advances in these fields. In terms of research in signal processing topics, the two chapters included in this book have a strong emphasis on advances in algorithmic development in the biomedical, and human-computer interfaces domain areas. More specifically, the use of deep learning for placental maturity staging is discussed as well as the use of vibration analysis for localising impacts on surfaces for human-computer applications. In terms of communications signal processing, advances in new wireless communication such as NOMA (non-orthogonal multiple access) and millimetre-wave antenna design for 5G cellular mobile radio, as well as innovations in LDPC (low density parity check code) decoding and networking coding, are featured.

Keywords: Signal processing, deep neural networks, source localisation, mechanical vibration analysis, non-orthogonal multiple access, millimetre-wave communication, low density parity check code, network coding.