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## Digital Signal and Image Processing as Underpinned with ML/AI – Technologies and Applications

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### Message from the Guest Editors

Dear Colleagues,

Research and exploration of recognition algorithms continues to be of great interest among researchers and practitioners in laboratories, corporations, universities, and various organizations. The onset of Artificial Intelligence and machine learning (ML) are now dedicated to ultra-fast pattern recognition. Electronic temperature devices and kiosk-based facial scanners with  $\leq 0.5$  °C are available via commercial markets, higher-performing integrated systems are required globally. The user-friendly human-machine interfaces that swiftly identify potential safety threats and support the mitigation of large-scale exposures are in demand. This Special Issue seeks to report recent mathematical developments and ML algorithms as applicable in both the medical and health diagnostic fields.

This Special Issue is dedicated to the presentation of novel approaches and results in the aforementioned areas. We invite you to submit significant updates to previously published papers or completely new manuscripts for double peer review.



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# Special Issue



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## Message from the Editor-in-Chief

Machine learning deals with understanding intelligence to design algorithms that can learn from data, gain knowledge from experience and improve their learning behaviour over time. The challenge is to extract relevant structural and/or temporal patterns (“knowledge”) from data, which is often hidden in high dimensional spaces, thus not accessible to humans. Many application domains, e.g., smart health, smart factory, etc. affect our daily life, e.g., recommender systems, speech recognition, autonomous driving, etc. The grand challenge is to understand the context in the real-world under uncertainty. Probabilistic inference can be of great help here as the inverse probability allows to learn from data, to infer unknowns, and to make predictions to support decision making.

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