
HMX Short Course - AI in Medicine

Biomedical Signal Interpretation

Learn about advances in interpreting biomedical signals, and the use of machine learning and deep learning to aid in analysis and diagnosis.

Recent advances in AI are enabling automated systems to detect patterns in biomedical signals with human-level or even superhuman performance, expanding access to timely and accurate interpretation of signal data for clinical use.

This short course will introduce you to the key ideas and approaches behind AI interpretation of biomedical signals, highlighting techniques that can directly analyze data to uncover intricate patterns. This course offers a unique way for professionals to learn from leading experts about the key concepts and evolving impact of AI in biomedical signal interpretation.

Topics Covered Include

- Introduction to Biomedical Signals and Deep Learning
- EEG Fundamentals
- Clinical Use of the EEG
- Detecting Arrhythmias Using Deep Learning
- Evaluating Deep Learning Models for Arrhythmia Detection
- Deep Learning for Arrhythmia Detection
- Assessing the Potential of Deep Learning for Detection of Arrhythmias
- Predicting Psychiatric Disorder Symptoms with EEG and Machine Learning
- Evaluating the Predictive Capacity of the EEG Model
- In Practice: Evolving Applications of AI in Biomedical Signal Interpretation

HMX Short Courses feature targeted lessons on the latest medical science information and advancements to keep learners up to date.