An AI-assisted EEG solution for Depression Detection : Stress EEG Assessment (SEA) System

AI technology is revolutionizing our lives, and its impact continues to be disruptive and innovative. In healthcare, AI applications are rapidly expanding, from accelerating drug development to enhancing the accuracy and speed of image-based diagnostics and streamlining healthcare management (such as electronic health records). Brainwave (EEG) technology is poised to become a hot topic for AI applications in promoting mental health.

The Stress EEG Assessment (SEA) System represents a significant milestone: it's the first Taiwan FDA-approved Software as a Medical Device (SaMD) to assist in diagnosing Depression. By analyzing 90-second brainwave signals, the SEA System provides a quantifiable SEA Index, indicating the likelihood of Depression. Importantly, the system enables objective screening even in patients who may not recognize their condition and only report physical symptoms.

During the presentation, Dr. Liu will delve into the technical aspects of developing diagnostic aids for depression and potentially other conditions. Meanwhile, Dr. Chu will share how the SEA System is currently used in clinical practice to enhance patient insight and treatment adherence.