Biography

Dr. Andy Yi-Hung Liu received the Ph.D. from National Taiwan University, and is currently a professor of the Department of Electrical Engineering and the Institute of Electrical and Control Engineering at National Yang Ming Chiao Tung University.

His research interests include brain-computer interface (BCI), artificial intelligence (AI)-enabled brain technology applications in smart healthcare, and EEG-based computer-aided diagnosis for brain disorder.

He has been an associate editor and a guest editor for some journals, such as Biosensors and the IEEE Journal of Selected Areas in Sensors.

Dr. Liu is also the Founder and Director of Hipposcreen Neurotech corp. (HNC), a subsidiary of Compal Electronics.

As a leading company in AI-enabled BCI products in Taiwan, Hipposcreen's new brainwave-assisted diagnostic products have obtained multiple FDA of the USA and Taiwan FDA's (TFDA's) approvals for market launch, including the stress electroencephalography (EEG) assessment system (SEA) for major depressive disorder (MDD) diagnosis and the Brain Degeneration Risk (BDR) assessment for early dementia and mild cognitive impairment (MCI) detection.

The AI-EEG software of the SEA product used for MDD detection has passed the formal clinical trials across medical centers, and has also obtained the first and so far the only one BCI-related software as medical device (SaMD) approval from TFDA in November, 2023.

Till now, the SEA system has been introduced as an EEG-assisted diagnosis tool in clinical practice at over 20 medical institutions in Taiwan, including 6 medical centers. This novel smart brain technology-based product was also awarded the Industry Innovation Award of the Year (年度產業創新獎) in BIO Asia-Taiwan, July 2024.