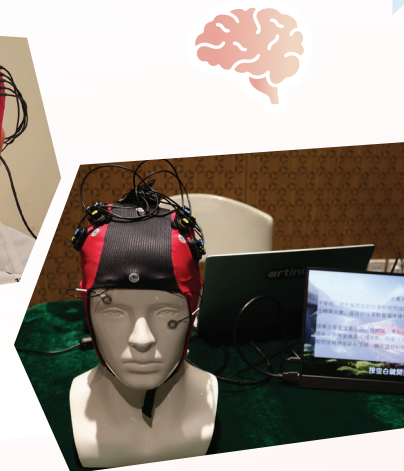
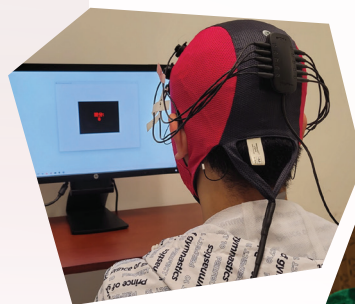


Principal Investigator

This versatile, cross-device and groundbreaking EEG-fNIRS neurofeedback platform enhances brain health and functioning in a user-friendly way at a more affordable cost than either electroencephalography (EEG) or functional near-infrared spectroscopy (fNIRS) capturing different aspects of brain activities. It provides significant benefits to the cognitive, emotional, and behavioural capabilities of the Autism Spectrum Disorder (ASD) community, commanding approximately 1% of the world's population.



- 1 One of the first hybrid systems combining EEG-fNIRS technologies to foster development in brain function and neurovascular coupling for autistic children
- 2 Provides a versatile solution to enhance a wide range of functions by intervening in different neural networks
- 3 Offers at least three interactive gamified training modules to enhance cognitive functions, emotion regulation, and social functioning in neuropsychiatric disorders
- 4 Uses ecologically valid feedback stimuli, reward delivery, and progressive loading to maximise treatment efficacy and adherence: these are rarely found in existing neurofeedback products
- 5 Enables a high-quality training experience across various devices
- 6 Alleviates stress in parents and teachers by providing effective tools for managing autism-related challenges
- 7 Promises to reduce healthcare costs while enhancing the well-being and daily-living capacities of autistic children

- ▶ Pioneer an improved autism-oriented neurofeedback training protocol
- ▶ Incorporate advanced machine learning algorithms for personalised training based on each child's unique brain patterns
- ▶ Collaborate with schools and healthcare providers to implement the technology widely within community settings at a more affordable cost than current options

[illegible]