Title: Brain-computer interfaces for stroke rehabilitation by RecoveriX

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Conference topics:

Brain-Computer Interface (BCI), EEG, real-time control, brain signal, neuroscience, Functional electrical stimulation (FES), stroke, rehabilitation

Expected duration: 1 hours, including 10 minutes of Q&A session.

Aim and Scope

Brain computer interface is one of the most promising and increasingly popular technologies for assisting and improving communication/control for motor paralysis (e.g., paraplegia or quadriplegia) due to stroke, spinal cord injury, cerebral palsy, and amyotrophic lateral sclerosis (ALS). This tutorial aim to introduce application of brain-computer interface on *stroke rehabilitation*, and *discovering the potential of BCI technologies*.

Contents

- Introduction on Brain-Computer Interface (BCI)
- Devices and technology used in BCI
- Latest development of BCI
- Applying BCI on stroke rehabilitation
- Q&A

Short biography

Mr. Micah Ching studied Biomedical Engineer at the University of Hong Kong and started working in the medical equipment field since his graduation in 2016. He joined G.tec in 2018 and responsible for the sales and support activities in APAC region, while assisting the development in real-time brain computer interfaces for the research, medical and consumer market. The company is active in many international research projects about brain-computer interfacing, neuromodulation, stroke rehabilitation, assessment and communication with patients with disorders of consciousness and high-gamma mapping in epilepsy and tumour patients.