FOG-IT

Personalized Freezing of Gait detection with the assistance of Deep Learning AI

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FREEZING OF GAIT
Inability to progress forward despite the intention to do so and reach a destination

- Episodic, Unpredictable & Debilitating
- 60% of people with Parkinson’s disease (PD) falls due to Freezing of Gait (FOG)
- Prevalence >70% after 10 years PD

FOG-IT project

PHASE 1 – Use previously collected FOG data to build a generic Deep Learning algorithm
PHASE 2 – Collect new FOG data with wearable sensors, foot pressure and camera to improve the Deep Learning algorithm
PHASE 3 – Enable Personalized FOG detection algorithms in an interactive platform complementing AI with clinical FOG expert
PHASE 4 – Pilot Personalized FOG detection algorithms for real-time applications.

FOG-IT - Innovative FOG dataset

40 people with PD and FOG will be assessed with and without PD medication while performing FOG eliciting tasks using wearable sensors and camera’s in a Movement analysis Laboratory (PART 1). Next, they will undergo the same FOG assessments in their home situation (PART 2). Finally, FOG monitoring will be done over several unsupervised days in the daily-life situation (PART 3).