Deep Movement Diagnostics

Initiative: zukunft.niedersachsen (nur ausgewählte Ausschreibungen)

Ausschreibung: Big Data in den Lebenswissenschaften der Zukunft

Bewilligung: 27.05.2019

Laufzeit:

Reliably evaluating walking and grasping movements of patients is essential for the diagnosis and therapy of movement disorders, for example after a stroke or in Parkinson's syndromes. However, the success of this challenging diagnostic procedure depends to a large extent on the experience and skills of the attending physician. This is where the "Deep Movement Diagnostics" project comes in. The team wants to use approaches from machine learning and robotics to improve the objective assessment of movement patterns. In addition to diagnostics, the research team wants to investigate complex movement sequences in healthy volunteers and monkeys in order to better understand the neurophysiological basics of movement disorders.

Projektbeteiligte

Prof. Dr. Alexander Gail
Deutsches Primatenzentrum GmbH
Leibniz-Institut für Primatenforschung
Bernstein Center for Computational Neuroscience
Göttingen

Prof. Dr. Mathias Bähr
Universitätsmedizin Göttingen
Georg August Universität
Fachbereich Neurologie
Abt. Neurologie
Göttingen

Prof. Dr. Florentin Wörgötter
Universität Göttingen
Fakultät für Physik
III. Physikalisches Institut - Biophysik
Arbeitsgruppe Computational Neuroscience
Göttingen

Prof. Dr. Melanie Wilke
Universitätsmedizin Göttingen
Georg August Universität
Department of Cognitive Neurology
Göttingen

Prof. Dr. Hansjörg Scherberger
Deutsches Primatenzentrum GmbH
Leibniz-Institut für Primatenforschung
Neurobiology Laboratory
Göttingen