



# BALAZS RADELECZKI

## RESEARCHER

**Research fields:** Analyzing muscle synergies, measuring and modeling cyclic human movements.

## EDUCATION

ROSKA TAMÁS DOCTORAL SCHOOL OF SCIENCES AND TECHNOLOGY, PÁZMÁNY PÉTER CATHOLIC UNIVERSITY, FACULTY OF INFORMATION TECHNOLOGY AND BIONICS

### Phd student

TOPIC: INFO-BIONICS ALGORITHMS  
2021 -

PÁZMÁNY PÉTER CATHOLIC UNIVERSITY, FACULTY OF INFORMATION TECHNOLOGY AND BIONICS

### Computer Science Engineer MSc

TITLE: TRAINED NEURAL NETWORK ON ELECTROMYOGRAPHIC DATA FOR THE CONTROL OF CRANKING MOVEMENTS

2019 - 2021

PÁZMÁNY PÉTER CATHOLIC UNIVERSITY, FACULTY OF INFORMATION TECHNOLOGY AND BIONICS

### Molecular Bionic Engineer Bsc

TITLE: IMAGE SEGMENTATION OF CHROMOSOMES ON MICROSCOPE RECORDS WITH MACHINE LEARNING

2015 - 2019

## WORKING EXPERIENCE

### WIGNER RESEARCH CENTRE FOR PHYSICS

ASSISTANT RESEARCH FELLOW  
2021 -

### REHABILITATION DEPARTMENT FOR SPINAL CORD INJURIES IN NATIONAL INSTITUTE OF MEDICAL REHABILITATION HUNGARY

RESEARCHER  
2022 -

### INTERSHIP AT ROBERT BOSCH KFT.

DRIVING-ASSISTANCE PROGRAM DEVELOPER  
2019 - 2020

## PERSOLNAL INFO



Balazs Radeleccki



23. 11. 2023, Miskolc



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## LANGUAGE

ENGLISH | "C" complex intermediate (B2) examination, 2014

## PROGRAMING SKILLS

**python** | Actively used, software development, data processing

**MATLAB** | Actively used, software development, data processing

**C++** | Intermediade experience, software development, data processing

**MS Office** | Actively used (Word, Excel, PowerPoint)

## GRANT

- Participating in the KD-OORI-TKP 2021 5.0. program „Procurement of a system containing 3D force plateaus for testing the effectiveness of cycling training for spinal cord injured persons assisted by functional electrical stimulation within the framework of the TKP 2021-EGA subprogramme.”

## PUBLICATIONS

- Radeleczki, B, M Mravcsik, L Botzheim, and J Laczko. 2022. **“Prediction of Leg Muscle Activities from Arm Muscle Activities in Arm and Leg Cycling.”** *ANATOMICAL RECORD*. doi:10.1002/ar.25004.
- Radeleczki B , Botzheim L, Nagy N, Laczko J, Mravcsik M, (2023) **“Change of ground reaction force and center of pressure in walking of spinal cord injured patients after FES cycling training – case studies”** abstract is submitted to Progress in Motor Control XIV.
- Botzheim L, Radeleczki B, Mravcsik M, Barroso F O, Laczko J, (2023) **“Investigation of muscle synergies during simultaneous arm-leg cycling – Case study”**, abstract is submitted to Progress in Motor Control XIV.
- Mayer P, Zenatai N, Mravcsik M, Bartók H, Radeleczki B, Laczkó J (2022). **“The effect of body position on the spasticity of quadriceps muscle after spinal cord injury”**, No. 303.15 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience