Zoltán Galáž

Selected publications

1. Galaz, Z., Drotar, P., Mekyska, J., Gazda, M., Mucha, J., et al. (2022). Comparison of CNN-Learned vs. Handcrafted Features for Detection of Parkinson's Disease Dysgraphia in a Multilingual Dataset. *Frontiers in Neuroinformatics*, 16(1). 1—18. DOI: 10.3389/fninf.2022.877139

2. Galaz, Z., Mucha, J., Zvoncak, V., Mekyska, J., Smekal, Z., et al. (2022). Advanced parametrization of graphomotor difficulties in school-aged children. *IEEE Access*, 8. 112883—112897. DOI: 10.1109/ACCESS.2020.3003214

3. Klobusiakova, P., Mekyska, J., Brabenec, L., Galaz, Z., Zvoncak, V., et al. (2021). Articulatory network reorganization in Parkinson's disease as assessed by multimodal MRI and acoustic measures. *Parkinsonism & Related Disorders*, 84. 122–128. DOI: `10.1016/j.parkreldis.2021.02.012`

4. Mucha, J., Mekyska, J., Galaz, Z., Faundez-Zanuy, M., Zvoncak, V., et al. (2020). Analysis of Various Fractional Order Derivatives Approaches in Assessment of Graphomotor Difficulties. *IEEE Access*, 8. 218234–218244. DOI: 10.1109/ACCESS.2020.3042591

5. Minsterova, A. S., Klobusiakova, P., Pies, A., Galaz, Z., Mekyska, et al. (2020). Patterns of diffusion kurtosis changes in Parkinson's disease subtypes. *Parkinsonism & Related Disorders*, 81. 96–102. DOI: 10.1016/j.parkreldis.2020.10.032

6. Galaz, Z., Mucha, J., Zvoncak, V., Mekyska, J., Smekal, Z., et al. (2020). Advanced Parametrization of Graphomotor Difficulties in School-Aged Children. *IEEE Access*, 8. 112883–112897. DOI: 10.1109/ACCESS.2020.3003214

7. Safarova, K., Mekyska, J., Zvoncak, V., Galaz, Z., Francova, et al. (2020). Psychometric Properties of Screening Questionnaires for Children With Handwriting Issues. *Frontiers in Psychology*, 10(2937). 1–12. DOI: 10.3389/fpsyg.2019.02937

8. Brabenec, L., Klobusiakova, P., Barton, M., Mekyska, J., Galaz, Z., et al. (2019). Non-invasive stimulation of the auditory feedback area for improved articulation in Parkinson's disease. *Parkinsonism & Related Disorders*, 61, 187–192. DOI: 10.1016/j.parkreldis.2018.10.011

9. Galaz, Z., Mekyska, J., Zvoncak, V., Mucha, J., Kiska, T., et al. (2019). Changes in phonation and their relations with progress of Parkinson's Disease. *Applied Sciences*, 8(12), 2339. DOI: 10.3390/app8122339

10. Mucha, J., Mekyska, J., Galaz, Z., Faundez-Zanuy, M., Lopez-de-Ipina, K., et al. (2018). Identification and monitoring of Parkinson's disease dysgraphia based on fractional-order derivatives of online handwriting. *Applied Sciences*, 8(12), 2566. DOI: 10.3390/app8122566

11. Gómez-Vilda, P., Galaz, Z., Mekyska, J., Vicente, J. M. F., Gómez-Rodellar, A., et al. (2019). Vowel Articulation Dynamic Stability Related to Parkinson's Disease Rating Features: Male Dataset. *International journal of neural systems*, 29(02). DOI: 10.1142/S0129065718500375

12. Harar, P., Galaz, Z., Alonso Hernández, J. B., Mekyska, J., Burget, R., et al. (2019). Towards robust voice pathology detection: Investigation of supervised deep learning, gradient boosting, and anomaly detection approaches across four databases. *Neural Computing and Applications*. DOI: 10.1007/s00521-018-3464-7

13. Mekyska, J., Galaz, Z., Kiska, T., Zvoncak, V., Mucha, J., et al. (2018). Quantitative Analysis of Relationship Between Hypokinetic Dysarthria and the Freezing of Gait in Parkinson's Disease. *Cognitive Computation*, 10(6), 1006–1018. DOI: 10.1007/s12559-018-9575-8

14. Brabenec, L., Mekyska, J., Galáž, Z., Klobušiakova, P., Koštálová, M., et al. (2018). Effects of non-invasive brain stimulation on motor speech disorder in Parkinson's disease. *Clinical Neurophysiology*, 129(4), e9. DOI: 10.1016/j.clinph.2018.01.030

15. Brabenec, L., Mekyska, J., Galaz, Z., and Rektorova, I. (2017). Speech disorders in Parkinson's disease: early diagnostics and effects of medication and brain stimulation. *Journal of Neural Transmission*, 124(3), 303–334. DOI: 10.1007/s00702-017-1676-0

16. Mekyska, J., Faundez-Zanuy, M., Mzourek, Z., Galaz, Z., Smekal, Z., et al. (2016). Identification and rating of developmental dysgraphia by handwriting analysis. *IEEE Transactions on Human-Machine Systems*, 47(2), 235–248. DOI: 10.1109/THMS.2016.2586605

17. Galaz, Z., Mekyska, J., Mzourek, Z., Smekal, Z., Rektorova, I., et al. (2016). Prosodic analysis of neutral, stress-modified and rhymed speech in patients with Parkinson's disease. *Computer methods and programs in biomedicine*, 127(1), 301–317. DOI: 10.1016/j.cmpb.2015.12.011