Ontology Based Description of Analytic Methods for Electrophysiology



NEUROINFORMATICS Research Group

ŠT?BETÁK, J., MOU?EK, R. Ontology Based Description of Analytic Methods for Electrophysiology. In *BIOSTEC 2016 – Proceedings of the 9th International Joint Conference on Biomedical Engineering Systems and Technologies, Volume 5: HEALTHINF*. Setúbal: SciTiPress, 2016. s. 420-425. ISBN: 978-989-758-170-0

The growing electrophysiology research leads to the collection of large amounts of experimental data and consequently to the broader application, eventually development of analytic methods, algorithms, and workflows. Then appropriate metadata definition and related data description is critical for long term storage and later identification of experimental data. Although a detailed description of electrophysiology data has not become a commonly used procedure so far, publicly available and well described data have started to appear in professional journals. The next reasonable step is to shift attention to the analysis of electrophysiology data. Since the analysis of this kind of data is rather complex, identification and appropriate description of used methods, algorithms and workflows would help reproducibility of the research in the field. This description would also allow developing automatic or semi-automatic systems for data analysis or constructing complex workflows in a more user friendly way. Based on these assumptions authors present a custom ontology for description of analytic methods and workflows in electrophysiology that is proposed to be discussed within the scientific community.

21.02.2016

?ím