Semantic Web in EEG/ERP Portal



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A short introduction to the EEG/ERP domain and a software solution for storing and managing of EEG/ERP experiments is presented in this paper. This solution was developed as a standalone web based system available for the community of researches to enable storing of experiments. Because authors' plan, to register this EEG/ERP portal as a recognizable data source, requires providing a domain ontology authors investigate the transformation of stored experiments into the Semantic web form. The transformation of experiments from the EEG/ERP portal into the Semantic web structures that resulted in the presented ontology is presented. Authors' presented a custom framework that adds missing semantics into the object-oriented code using Java Annotations. The paper also presents the ontology generated using a developed framework. Subsequently the paper simply describes a registration of the domain ontology within the Neuroscience Informational Framework.

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