

JESSICA CALLEGARO

< software developer >

ABOUT ME

Software developer with 4+ years of hands-on experience designing, developing and implementing data management solutions for neuroinformatics and clinical research industry clients.

EDUCATION

2019 **B.A.Sc Cognitive Science, Minor Computer Science**
McGILL UNIVERSITY

EXPERIENCE

2021- Present **Senior Research Software Developer**

EEGNet-LORIS | MCGILL CENTRE FOR INTEGRATIVE NEUROSCIENCE (MCIN)

- Supported researchers and technical experts standardizing, documenting and processing data on neuroinformatics platforms, with a focus on interoperability and developing data standards for the global neuroscience community.
- Investigated best practices and led platform design discussions on information flow, database storage and EEG data processing in order to curate realistic implementation plans and roadmaps that address client needs.
- Implemented and updated technical features such as file format conversion, support and standardization, visualization utilities, electrophysiological signal file handling and deployment to analysis pipelines.
- Worked with technologies such as React, Redux, Typescript, Python, PHP, Docker, Electron.

2018-2021 **Research Software Developer**

CCNA-LORIS | MCGILL CENTRE FOR INTEGRATIVE NEUROSCIENCE (MCIN)

- Led a team of 3 people to maintain, develop and deliver features for a private instance research platform.
- Reduced the download time of large-scale datasets by 85% through the implementation of a ProFTP server, with configuration of MySQL Authentication to maintain security of data.
- Automated the validation, processing, packaging and tracking of data through various custom PHP scripts.
- Implemented new tools for disseminating neuroimaging data that allowed researchers to analyze partitions of data more effectively.
- Accomplished interoperability between the study's different data sources by creating an exporter from CouchDB to MySQL.
- Directed 2 major version upgrade efforts.
- Handled bi-weekly deployments of code.
- Strengthened relationships with CCNA and 5 related sub-studies in order to better understand the client's needs and deliver appropriate features.

TECHNICAL SKILLS

PHP		React	
SQL		Redux	
Javascript		HTML5 / CSS3	