SWISS ✚
Brain Data Bank

About the Swiss Brain Data Bank

The Swiss Brain Data Bank (SBDB) is a cloud-based brain data aggregator platform powered by a suite of state-of-the-art cloud-based applications developed and refined by NeuroPro.

Key features

The SBDB is the only portal that offers sophistication and functionality both from a systems and procedures at the back end, to the advanced 3D and 2D front end interfaces and powerful processing facilities.

Technology

The platform enables Swiss hospitals and medical institutions who work on brain related diseases to

- unlock the monetary value of their patient brain data through anonymising, securing and organising patient cases, and
- making these cases available for licensing globally.

The SBDB team provides the total deployment solution; legal compliance, digital assessment, asset due-diligence, software platform, migration tools and mostly importantly the skills, training and funding needed to on-board Swiss hospitals to the advanced platform.
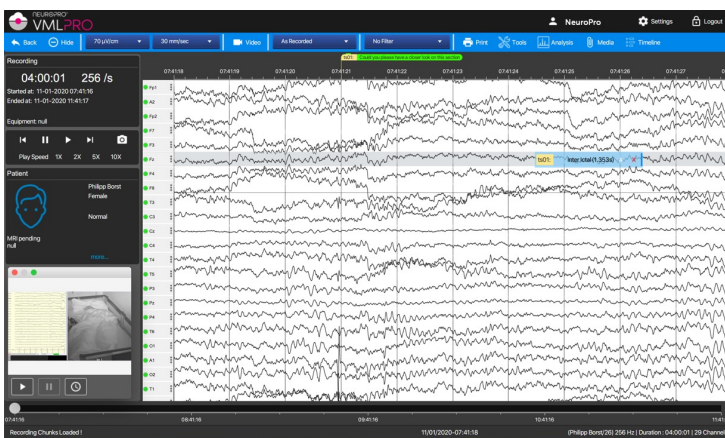

The SBDB platform connects a two-sided market: Our partners (suppliers), medical institutions, the providers of datasets, upload or "deposit" anonymized brain datasets for licensing on the platform, and on the demand-side, the customer, institutions register to browse, buy, and download deposited datasets.

The SBDB is making relevant brain data accessible in an anonymized, secure and timely manner, ensuring consistency, completeness and availability of cases to support and empower human brain research.

SBDB Data Viewer

The SBDB Data Viewer, the technology behind SBDB, facilitates the collation, curation, collaboration and computation of extremely large EEG, MRI, CT scans and any kind of medical data sets from anywhere at anytime.

EEG visualisation in Data Viewer

Key features

- Scalable, secure cloud storage
- Rapid, parallel processing
- Database management
- Built-in and Pluggable analytics
- Multiple, intuitive user-interface

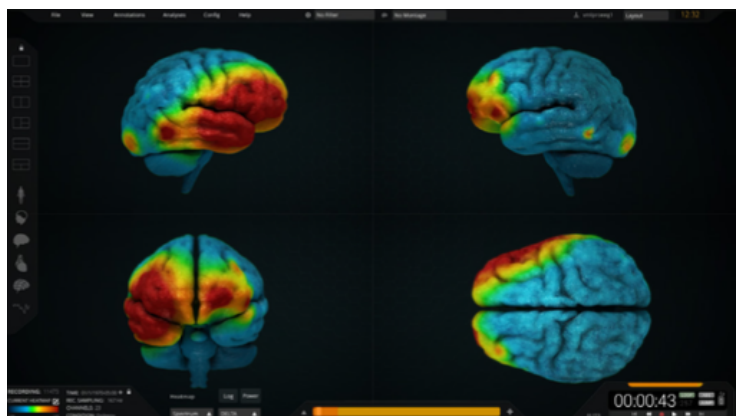The system security is guaranteed from
- SSL communication between clients and servers
- Encrypted user repository (at rest and in transit)
- Multi-tenant access privileges
- Fully audited API calls
- AWS firewalls protect database and analysis servers with multi-factor authentication

Key features

- 3D visualisation of EEG and ECG data and derived variables
- Multiple data inputs:
  - Local storage
  - NeuroPro's data cloud
  - Bluetooth / Bluetooth LE
- Real-time communication with EEG devices:
  - Muse
  - OpenBCI
  - IMEC headsets
- Interactive graphical user interface
- Multiple 3D visualisation modes
- Spectral analyses

SBDB Analysis - NeuroVIS

NeuroVIS is a realtime data analysis and visualisation engine currently optimised for biosensory and neuroscience applications.

EEG visualisation on cortical model

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NEUROPRO

The Swiss Brain Data Bank (SBDB) is an aggregator platform, powered by superior software and cloud architecture created by NeuroPro.

How we work

Partnership is a key element in the way we work. We collaborate with global leaders in the design, development and implementation of our products and welcome new collaborations.

Contact us

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