



Machine Learning Engineer

IDUN is a swiss-based ETH-Spinoff founded in November 2017. At IDUN Technologies Ltd. our vision is to usher in the next evolution in IoT, evolving it into the Internet of Humans: in which our bodies drive, actively and passively, our experience with our wearable devices, and we have actionable data about ourselves. We have a holistic understanding of all aspects in the pipeline between the body and IoT experience. This pipeline can be broken down into three primary aspects: (1) *understanding the body for actionable insights*, (2) *innovative biosensor development*; and (3) *integration, data collection and analysis*. For more details please visit www.iduntechnologies.ch.

The Opportunity

IDUN Technologies is seeking a dynamically minded Machine Learning (ML) Engineer to accelerate the development of algorithms and data infrastructures for the analysis and modelling of biosignals with a focus on EEG processing and neurotech product development. Do you want to build the world you want for yourself and society instead of trying to fit into the one that has been already created? This is the opportunity we can offer at the intersection between humanity and connected device evolution. We are seeking someone who can:

- Bring a background in machine learning methods, time series data pre-processing, analysis pipeline development and model building.
- Understand signal processing of timeseries data and feature extraction using conventional analytical and ML methods.
- Explore deep learning methods for feature extraction from complex time series data streams that are relevant to neurological events.
- Work with test engineers and the product team to setup model training pipelines with data from neurocognitive tests.
- Build short and long-term strategies for data warehouses and model training environments.

Key Responsibilities (include but are not limited to)

- Have characterized time series data using ML/DL approaches.
- Extract Transform Learn (ETL) approaches and data infrastructure design.
- Have worked with brain computer interface devices.
- Academic background (university degree) in biomedical engineering or related field combination (neuroscience and engineering focus).
- Data analysis and methods for EEG raw data feature extraction and interpretation of results using Python.

Professional Competencies

You have the ability to structure yourself and get the inputs and competencies needed to thrive in your activity. You are able to explore experimental data and generate meaningful results in a systematic way in order to push the product development and support the sales team. You will strongly cooperate with a neuroscientist and a test engineer by creating EEG data sets which are processed and interpreted. This requires an interdisciplinary affinity for both human physiology and algorithm development.

Mindset

You will be the expert in your field with the freedom and responsibility to make your own decisions aligned with the company's vision. We work very well with people embracing opportunities and building their own team and structure to drive the company's success. We will care for you and your happiness at IDUN and we will listen to your inputs. Please find our company values [here](#).

The above job description is a guide to the work you may be required to undertake but does not form part of your contract of employment and may change from time to time to reflect changing circumstances.