

Expert Group Charter

Name: Machine Learning Clinic (ML in Industrial Practice)

Academic leader: Thilo Stadelmann, ZHAW Datalab, thilo.stadelmann@zhaw.ch

Industrial leader: Michel Benard, Google, benard@google.com

Abstract: Machine learning is *the* key enabling technology behind data-intensive services. The state of the art is advancing at high pace and is being thoroughly evaluated on certain established benchmark environments like "MNIST". However, the application of novel techniques in e.g. deep learning or reinforcement learning on different industrial use cases is often delayed due to a lack of points of contact between research capacity and real-world applications.

The expert group "Machine Learning Clinic" is geared towards machine learning practitioners from industry and academia. Its goal is to re-link machine learning with industrial practice to collect best practices and facilitate collaborations among members. Real world use cases are being presented, and applicable methods and best practices are identified, discussed, and tried. Industrial data+service members benefit from diverse state of the art expertise from other members; and academic members benefit from new application scenarios, offering the possibility to try methods in real-world conditions and realize cross-industry transfers.

The expert group will revolve around questions like "how to gain theoretical & intuitive insight into how and why a certain algorithm works?" and "how to make machine learning easy to use?". We will collect our findings and best practices and contribute them back to the data+service alliance as well as the international research community.

First meetings:

Inaugural meeting (incl. first 2 use cases): September 8th, 2016, 14:00-17:00, Google ZH. Workshop for prospective users and non-experts with the goal to spin off ideas and prototypes: October 7th, 2016, 15:00-18:00, Google ZH.

Intended schedule: Quarterly. Meetings shall consist of the presentation of 2-4 use cases from industry, to be submitted to the organizers beforehand. Submitters commit to curating discussion results in a wiki public within the data+service alliance (thus, presented use cases shall not be confidential).

Prospective members: We intend to write an open call for participation to the complete data+service mailing list; overall, we have room for ca. 20 machine learning practitioners.