Contribution ID: **14** Type: **Remote project**

Machine Learning for Predictive Maintenance.

The European XFEL generates extremely intense X-ray flashes used to explore the structure and dynamics of matter. In the Data Analysis team, we are researching and developing Machine Learning methods to automatize the analysis pipeline and optimize the beamtime taken by scientists when collecting data. One of the projects under development aims to detect anomalies within the system monitoring the machine, to minimize failures and downtime periods. In this project, a Python software should be developed to collect and pre-process data from a database containing information from thousands of devices, and perform a comparison of different Machine Learning methods to establish which method would be ideal to detect and prevent anomalies.

Field

B6: Computing

DESY Place

Hamburg

DESY Division

other

DESY Group

EuXFEL Data Analysis

Special Qualifications:

The ideal candidate is expected to have experience on the following areas:

- Python
- Scikit-learn
- pandas
- Machine Learning is an asset

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