

NeptuneClusterML is an automated machine learning software that simplifies the machine learning process by automating many of the manual tasks involved in building and deploying models. It is built on top of the H2O.ai platform, which is a scalable and distributed machine learning platform. It provides a user-friendly interface that allows users to point and click their datasets and configure the machine learning task they want to perform without coding. The software automatically performs data preprocessing, feature engineering, and model selection, allowing users to focus on domain knowledge of the problem at hand.

Specifications

Specification	Description
Deployment	On-premise, cloud-based
Algorithms	Regression, classification, time series, deep learning
Performance	Parallel processing, distributed computing, GPU acceleration
Visualization	Model performance, feature importance, model explanation
Integration	Neptune Cluster, SCADA

Algorithm Types

Algorithm Type	Algorithms
Linear Models	Linear Regression, Elastic Net, Generalized Linear Models (GLM)
Tree-based Models	Decision Trees, Gradient Boosting Machines (GBM), XGBoost, LightGBM, CatBoost, Random Forest
Deep Learning	Multilayer Perceptron (MLP), Convolutional Neural Networks (CNN), Recurrent Neural Networks (RNN)
Miscellaneous	Principal Component Analysis (PCA), Stacked Ensembles



The screenshot shows the Neptune Cluster Machine Learning interface. On the left, there are two main panels: '1. Trident Historizer' and '2. Query Selection'. The 'Trident Historizer' panel includes a 'URL' field with the value '102.108.1.140:8080'. The 'Query Selection' panel includes a 'Choose Start Date' field with the value '2013/01/01', a 'frequency' dropdown set to 'h', a 'timeunits' section with radio buttons for 'days', 'weeks', 'months', and 'years' (where 'years' is selected), a 'pre-aggregators' dropdown set to 'avg', a 'value' dropdown set to '1', and a 'units' section with radio buttons for 'minutes', 'hours', 'days', 'weeks', 'months', and 'years' (where 'days' is selected).

Neptune Cluster Machine Learning

1. Data loading

