LIBRARIES FOR IMPLEMENTING MACHINE LEARNING IN JAVA

Skills in machine learning and deep learning are one of the hottest ones in the new tech world right now, and companies are constantly on a look out for programmers with good knowledge of ML. Java is definitely one of the most popular languages after Python, and has become a norm for implementing ML algorithm these days. Some of the many advantages of learning Java include acceptance by people in the ML community, marketability, easy maintenance and readability, among others. Following are the best machine learning libraries for Java.

1. **ADAMS**

Short for Advanced Data mining And Machine learning System, ADAMS follows the philosophy of “less is more”. Instead of letting the user place operators or “actors” on a canvas and then manually connecting input and output, ADAMS uses a tree-like structure to control how data flows in the workflow.

2. **ELKI**

ELKI, short for Environment for Developing KDD-Applications Supported by Index-structure, is also an open source data mining software written in Java. It is a knowledge discovery in databases (KDD) software framework. It aims at developing and evaluating advanced data mining algorithms and their interaction with database index structures. ELKI also allows arbitrary data types, file formats, or distance or similarity measures.

4. **JSAT**

The Java Statistical Analysis Tool, is a Java library for machine learning to get quickly started with ML problems. Available for use under the GPL3, part of the library is for self-education. All code is self-contained, with no external dependencies. It has one of the largest collections of algorithms available in any framework. It is usually considered faster than other Java libraries, offering high performance and flexibility. Almost all of the algorithms are independently implemented using an object-oriented framework.

5. **Mahout**

It is an ML framework with built-in algorithms to help people create their own algorithm implementations. Apache Mahout is a distributed linear algebra framework which is designed to let mathematicians, statisticians, data scientists and analytics professionals implement their own algorithm. This scalable ML library provides a rich set of components that lets you construct a customized recommendation system from a selection of algorithms. Offering high performance, scalability and flexibility.

6. **MALLET**

Short for Machine Learning for LanguagE Toolkit, MALLET is an integrated collection of Java code used for areas like statistical NLP, cluster analysis, topic modelling, document classification and other ML applications to text. In other words, it is a Java ML toolkit for textual documents

7. **Massive Online Analysis**

MOA is an open source software used specifically used for machine learning and data mining on data streams in real time. It is developed in Java and can also be easily used with Weka. The collection of ML algorithms and tools is extensively used in the data science community for regression, clustering, classification, recommender systems, among others. It can be useful for large datasets including data produced by IoT devices. It consists of large collections of ML algorithms designed for large scale machine learning, dealing with concept drift.

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