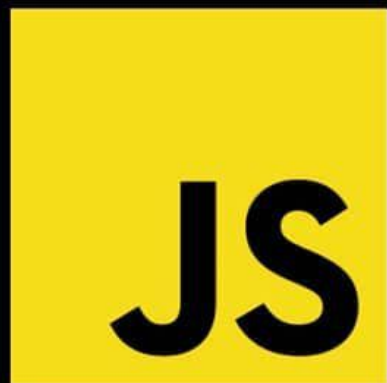# 15
MACHINE LEARNING
JAVASCRIPT LIBRARIES

JS

#1. Tensorflow.js

Tensorflow.js can be used directly in the browsers while leveraging WebGL for accelerations. The Tensorflow.js model of supporting both browsers and Node.js environments has been adopted by many open-source libraries including brain.js and machinelearn.js.

#2. brain.js

Brain.js is a Javascript library for Neural Networks replacing the (now deprecated) "brain" library, which can be used with Node.js or in the browser (note computation) and provides different types of networks for different tasks.

#3. ml.js

ml.js is a comprehensive, general-purpose JavaScript ML library for browsers and Node.js.It provides straightforward and mission-critical models and utilities for supervised and unsupervised problems. Focusing on the simplicity and all-in-one general-purpose machine learning for Javascript and Typescript developers, it provides clustering, decomposition, ensemble, bagging, linear models, feature extractions and more.

#4. stdlib

stidlib is the fastest, easiest way to build infinitely scalable, self-healing APIs. Standard Library is based on Function as a Service ("serverless") architecture, initially popularized by AWS Lambda.

#5. ConvNetJS

ConvNetJS is another library for neural networks and deep learning. It enables training neural networks in browsers. In addition to classification and regression problems, it has the reinforcement learning module (using Q-learning) that is still experimental. ConvNetJS provides support for convolutional neural networks that excel in image recognition.

#6. Neataptic

Neataptic offers flexible neural networks; neurons and synapses can be removed with a single line of code. No fixed architecture is required for neural networks to function at all. This flexibility allows networks to be shaped for your dataset through neuro-evolution, which is done using multiple threads.

#7. Synaptic

Synaptic implements a general "architecture free" algorithm that can be used to create a wider range of network types than usually encountered. It comes with some predefined networks – multilayer perceptrons, multilayer long-short term memory networks, liquid state machines, and so on.

#8. KERAS.JS

Keras has become the leading neural network library for the creation and preparing of profound learning models over a huge scope of platforms. Written in Python and boasting more than 250,000 individual clients, it is the second most prominent deep learning structure after TensorFlow.

#9. Math.js

Mathjs is a library for all math needs in JavaScript with broad linear algebra APIs including matrix operations and core math. It is very lightweight as it doesn't rely upon other increasing acceleration techniques, for example, WebAssembly or WebGL.

#10. Limdu.js

Limdu.js is a machine learning framework for Node.js that supports Binary classification, multi-label classification, feature engineering, online learning, and real-time classification. It is currently in alpha state and looking for contributors.

11. Neuro.js

Neuro is a library for developing and training ML models in JavaScript, and deploying in the browser or on Node.js.It also helps in building AI assistants and chat-bots.

#12. Deeplearn.js

deeplearn.js is an open-source hardware-accelerated JavaScript library for machine intelligence. deeplearn.js brings performant machine learning building blocks to the web, allowing you to train neural networks in a browser or run pre-trained models in inference mode.

13. Apache MXNetjs

MXNetJS is the Apache MXNet Javascript package. MXNetJS brings state of art deep learning inference API to the browser. It is generated with Emscripten and MXNet Amalgamation.

14. Synapses

Synapses is a lightweight Neural Network library, for js, JVM and .net. It features fitNetwork which is a new neural network trained with a single observation.

15. Compromise

compromise is a javascript library that interprets the and parses text. and makes some reasonable decisions. compromise works by compressing a large list of words and then expanding them at runtime.