50 Useful Machine Learning & Prediction APIs

We present a list of 50 APIs selected from areas like machine learning, prediction, text analytics & classification, face recognition, language translation etc. Start consuming APIs!

As the Artificial intelligence & Machine learning based applications evolve, we see numerous mash ups of APIs to experiment with. Get started with this list of selected APIs to explore their capabilities & features in machine learning, prediction, face recognition, image processing, speech recognition etc. Check out where these APIs are put into use!

Machine Learning and Prediction

- AlchemyAPI: Offers Artificial Intelligence as a Service. Use in transforming unstructured data into structured especially in social media monitoring, business intelligence, content recommendations, financial trading and targeted advertising.
- Alina: Machine learning as an intelligence-as-a-service provider. A live mashup that consumes Alina demonstrates the API's ability to use genetic algorithms and artificial neural networks to analyze historical Bitcoin price fluctuations to predict and automate future trading.
- Amazon Machine Learning: To find patterns in data. Example uses of this API are applications for fraud detection, forecasting demand, targeted marketing, and click prediction
- BigML: BigML is a service for cloud-hosted machine learning and data analysis. Users can set up a data source, create a dataset, create a model from the dataset, and then make predictions based on the data.
- Ersatz : a web-based machine learning program that can automate recognition

tasks that previously required human interaction. The Ersatz platform can be used or model & data visualization, team collaboration, and GPU computing, all from within a browser.

- Google Prediction: brings the power of machine learning to anyone. Upload your data and build a model to train the system by showing it the right answer for known items. When the system is trained, you can have it make predictions.
- Guesswork: Guesswork predicts customer intent accurately using a semantic rules engine that runs on top of the Google Prediction API.
- Hutoma: AIs are powered by a deep learning network and can be trained to understand specific topics by simply submitting a text file containing examples of conversations. Creates & Deploys Siri like interfaces.
- IBM Watson: Select group of partner developers are exploring the cognitive capabilities or human-like capacity of Watson in areas like image recognition, language processing and reasoning services. Noted examples are "medical diagnostic apps" that read through millions of research papers and "IBM Watson Engagement Advisor" a learning app to help veterans answer complex questions.
- IBM Watson Retrieve and Rank: uses machine learning to enhance information retrieval by looking for "signals" in a given collection of data. Developers can load their data into the service, use known relevant results to train a machine learning model
- Imagga: an Image Recognition Platform-as-a-Service providing Image Tagging APIs for developers & businesses to build scalable, image intensive cloud apps.
- indico: turns raw text and image data into human insights. The indico API is free to use, and no training data is required
- NuPIC : The NuPIC API allows developers to work with the raw algorithms, string together multiple regions (including hierarchies), and utilize other platform functions.
- PredicSis: Use PredicSis to upload a dataset, create a dictionary of variables, and design your predictive model.
- PredictionIO: PredictionIO is an open-source machine learning server. Example API methods include creating and managing users and user records, retrieving items and content, and creating and managing recommendations based on the user.
- Predictions: provides long-range predictions for travel and hospitality. It is powered by algorithms that ingest big data, compare all destinations at once and identify where the best conditions for vacations, sports and activities are, anywhere in the world, with months in advance.
- RxNLP - Cluster Sentences and Short Texts: a Text Mining and Natural Language Processing service. One of RxNLP's API's, The ClusterSentences API, can group sentences (such as sentences from multiple news articles) or short texts (such as

posts from Twitter or Facebook Status Updates) into logical groups.

- Sightcorp F.A.C.E. : a web service which allows 3rd party applications to develop smarter and interactive applications using the Face Analysis Technologies from Sightcorp. The technology may be used to better understand user behavior and retrieve relevant face analytics like their age, gender, facial expressions, head pose or ethnicity.
- Windows Azure Machine Learning Recommendations: The Azure Machine Learning Recommendations service provides solutions based on predictive analysis. By additionally offering data to consume, the API features models, catalogs, features, usage data, and notifications with the purpose to build machine learning solutions on the cloud.
- Wise.io: helps developers to integrate handwritten digit recognition, spam filtration, political party affiliation recognition, and activity recognition with sensor data as mentioned in the examples of the website.

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Face and Image Recognition

- Animetrics Face Recognition: This API can be used to detect human faces in pictures and match them against a set of known faces. The API can also add or remove a subject from a searchable gallery, and add or remove a face from a subject.
- Betaface : a facial recognition and detection web service. Features include multiple faces detection, faces cropping, 123 face points detection (22 basic, 101 advanced), faces verification, identification, similarity search in very large databases etc
- Eyedea Recognition: a recognition service that offers eyeface, vehicle, copyright and plate detection. The main value of the API could be to have access to an instant understanding about objects, users, and behaviors.
- Face++: a facial recognition and detection service that provides detection, recognition and analysis for use in applications. Users can make calls to train the program, detect faces, recognize faces, group faces, manipulate people, create face sets, create groups, and get info.
- FaceMark: FaceMark is an API capable of detecting 68 points on a frontal face photograph, and 35 for a profile face photograph.
- Google Cloud Vision API: helps you find your favorite image, and get rich annotations of it quickly and at scale. It classifies images into thousands of categories (e.g., "boat", "lion", "Eiffel Tower"), detects faces with associated emotions, and recognizes printed words in many languages.

- Microsoft Project Oxford Vision: allows developers to access and integrate the vision functionality of Microsoft Project Oxford. Some example API methods include processing images, detecting images, and returning thumbnail images.
- Rekognition: provides facial and scene image recognition optimized for social photo applications. Utilizing the eyes, mouth, face and nose along with mood recognition and sex dependent characteristics the Rekognition API can predict sex, age and emotion.
- FaceRect: an API capable of detecting faces in images. The API can detect multiple faces within a given image, including both frontal and profile faces, and search for face features (eyes, nose, mouth) within each detected face.
- Kairos: a facial recognition API that allows users to integrate advanced security features into their applications and services
- Skybiometry Face Detection and Recognition: provides a face detection and recognition service and can be used as a drop-in replacement for discontinued face.com API.

Text Analysis, NLP, Sentiment Analysis

- AlchemyAPI: AlchemyAPI offers artificial intelligence as a service. Currently available text analysis functions include entity extraction, sentiment analysis, keyword extraction, concept tagging, relation extraction, text categorization, author extraction, language detection, text extraction, microformats parsing and RSS/ATOM feed detection.
- AlchemyAPI Keyword Extraction: extracts topic keywords from text, HTML, or posted web-based content. This API normalizes the targeted text, removing ads, navigation links, and other unnecessary content, then extracts topic keywords.
- Bitext Sentiment Analysis: a suite of multilingual semantic services. Currently four semantic service are available: entity and concept extraction, sentiment analysis and text categorization.
- Calais: Using natural language processing, machine learning and other methods, Calais categorizes and links your document with entities (people, places, organizations, etc.), facts (person "x" works for company "y"), and events (person "z" was appointed chairman of company "y" on date "x").
- Semantic Biomedical Tagger: has a built-in capability to recognize 133 biomedical entity types and semantically link them to the knowledge base systems.
- Free Natural Language Processing Service: sentiment analysis, content extraction, and language detection.
- nlpTools: decodes online news sources for sentiment analysis and textual classification. In order to analyze the sentiment or classify of a line of text, developers may use this API to receive a return of a category label and a conditionality on the piece ranging from positive, neutral, to negative sentiment.

- Diffbot Analyze: provides developers tools that can identify, analyze, and extract the main content and sections from any web page.
- Skyttle: Market Sentinel's text mining engine, which analyses text for topical keywords and phrase-level sentiment. Languages supported are English, French, German, Russian.
- Speech2Topics: analyzes audio and video to extrapolate big data, using natural language processing and speech recognition.
- TweetSentiments: performs semantic analysis of tweets using a Support Vector Machines algorithm. Doing so, it is able to determine whether tweets are positive, negative or neutral in sentiment.
- Text Processing: provides functions that include summarizing documents, tagging documents, stemming words to their base forms, removing stopwords, tagging parts of speech (POS), translating from Bahasa Indonesia to English, and retrieving word definitions.
- MeaningCloud Text Classification: The Text Classification API performs pre-classification tasks like: extracting text, tokenization, stopword removal and lemmatization. Using rule-based filtering and statistical document classification, the API can perform accurate classification across a wide range of environments.

Translation

- Google Translate: Currently in second version, google translate provides researchers, in the field of automatic machine translation, tools to help compare and contrast with, and build on top of, Google's statistical machine translation system.
- LangId: a fast way to retrieve information about any sort of language, without specifying the language.
- MotaWord: provides translations in over 70 languages. The API also lets developers get quotes for each translation, submit translation projects along with documents and style guides, track the progress of translation project and get activity feeds in real time.
- WritePath Translation: API allows developers to access and integrate the functionality of WritePath with other applications. Some example API methods include retrieving word counts, posting documents for translations, and retrieving translated documents and text.
- IBM Watson Language Translation: uses statistical machine translation techniques to provide domain-specific translations. They currently offer three domains(conversational, patent & news) that can translate between a total of seven languages.

References: Mashape Blog & Programmable Web

Did we miss your favorite APIs? We will keep updating the list ! Tell us what's on your mind in the comments.

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