

Empowering IT landscape using the potential of Machine Learning



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Digital Minds
TECHNOLOGIES INC.
Value Delivered

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Overview

Context:

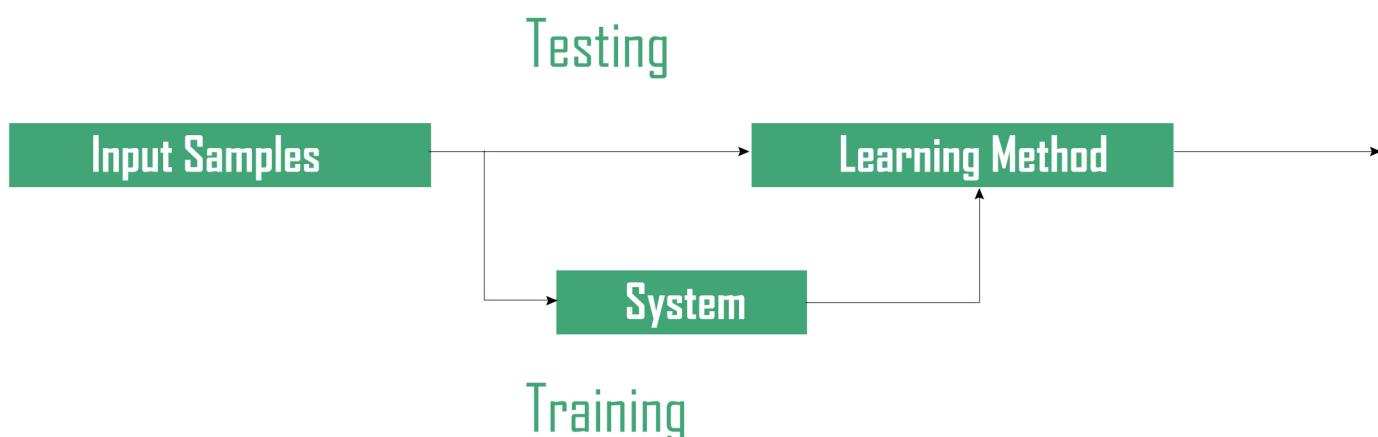
Focused on the design and development of algorithms that allow computers to evolve behaviors based on empirical data

“As intelligence requires knowledge, it is necessary for the computers to acquire knowledge.”

Our approach

- Understanding domain, prior knowledge, and goals.
- Data integration, selection, cleaning and pre-processing
- Make learning models & Interpreting results
- Consolidating and deploying discovered knowledge
- Loop

Our typical Learning System Model

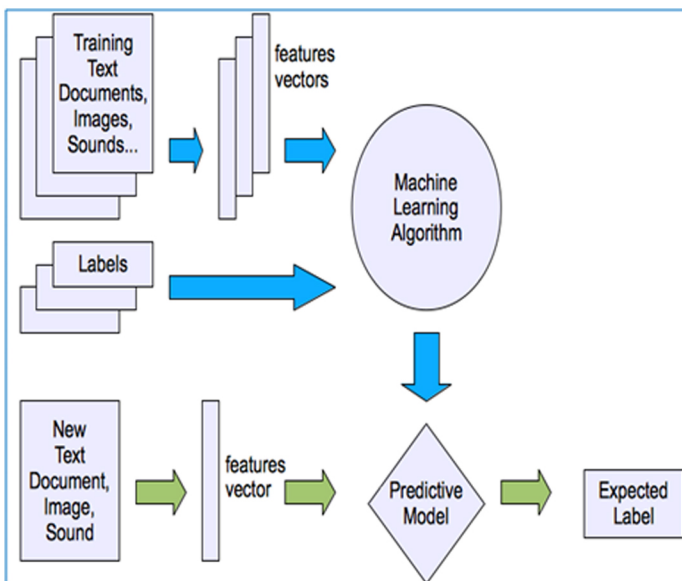


Machine learning structure

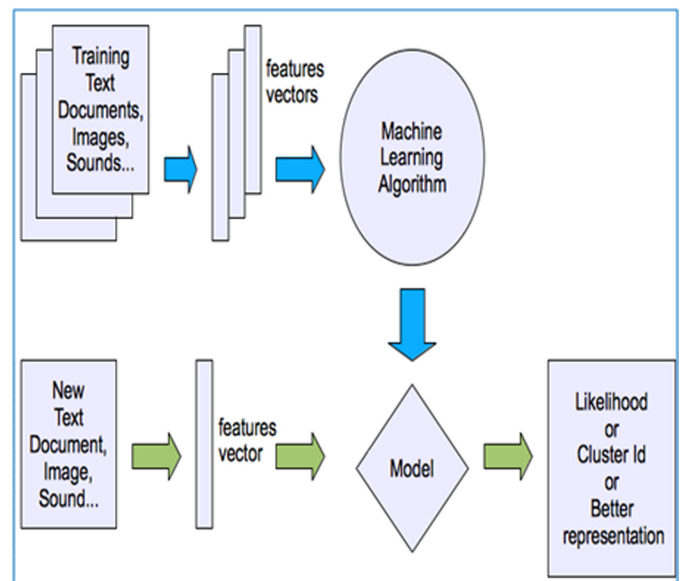
Our experience

- The success of machine learning system depends on the algorithms used.
- The algorithms control the search to find and build the knowledge structures.
- The learning algorithms should extract useful information from training examples.

Supervised learning



Unsupervised learning





Case study 1

Implemented Machine Learning programs for one of the leading U.S.A. based retail client on below areas:

- > **Automatic categorization of products** based on analyzing product descriptions and specifications.
- > **Improved search results** by applying algorithms to rate the existing search results and fine tune the search attributes of products.
- > **Improved the browse experience** through personalization by considering the factors such as customer segment and category/sub-category ranking.
- > Improved the **predictability of recommendation engine** by analyzing the result of past customer behavior in the website.
- > **Improved customer experience** by evaluating the quality of pictures using photo entropy technique so that low quality pictures are replaced with most appropriate default image / no image.
- > **Improved auto-fill capabilities** while searching something in the search bar with the most appropriate image of the product / hierarchy.

Case study 2

Implemented Machine Learning programs for one of the leading India based job portal for below purpose:

Problem statement:

Client receives high number of resumes everyday from their affiliates. In-order to publish the candidate details online and make it available for the employers to search based on various keywords, good amount of manual work was needed on each resume to classify it properly.

Our solution:

Developed ML programs that scan through the documents and automatically tag profiles to various qualifiers based on the keywords identified from resumes.

Results:

- ✓ The manual task of reading profiles completely and associate to various qualifiers is reduced to just review and approve the data filled by our ML program.
- ✓ Improved the resume intake frequency of the system and publishing time.
- ✓ Iterative approach helped in evaluating the logic of algorithm periodically and apply optimizations to improve the efficiency of profile categorizations.

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