What is **DataNeuron**?

DataNeuron helps you accelerate and automate human-in-loop labeling for developing AI solutions. Powered by a data-centric platform, we automate data labeling, the creation of models, and end-to-end lifecycle management of ML.

**But why should we switch from manual labelling to the DataNeuron ALP?**

- **85% of ML projects don’t progress beyond MVP due to quality and quantity of labelled data.**

- **Using just 2% of the labeled data when compared to human-in-loop annotation.**

- **Estimated 90% reduction in Time Spent with Auto-Annotation.**

- **DataNeuron’s Auto-Annotation eliminates human bias from the process.**

- **Manual labelling can be biased, reducing model accuracy.**

- **Companies do not have a scalable and secure platform for data exchange.**

- **Our Product**

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The concept of a hierarchical structure.

Machine Learning is not binary so we don’t rely on rules or pre-defined functions, we rely on the simpler structure which is the Masterlist where we allow classes to have overlap. Further we support taxonomy or hierarchical ontologies on the Masterlist. Data Analyst can also select the model class on the Masterlist.

How does the labeling in DataNeuron ALP work?

The DataNeuron ALP follows a semi-supervised annotation. The platform provides auto-labeling to the users and suggests the paragraphs that are likely to belong to a specific class; users have to accept or reject at the validation stage.

The validation is split into two stages:

- In Stage 1, We identify the paragraphs based on the Masterlist and we provide the relevant paragraphs for validation in Stage 1, user needs to validate (~15 paragraphs per class).
- Stage 2 will be generated based on our ensemble mode (which is a context-filtering and semi-supervised based model) to provide higher accuracy at Stage 2.

Our platform is designed to support Strategic Annotation: Our annotation is not only done on the paragraphs of a particular class that the model think they belong to. It is also on the data/paragraph which are critical in determining a class boundary.
What if there are changes to the taxonomy of our data or we want to improve the model accuracy?

The DataNeuron ALP supports an iterative functionality where you can improve the model accuracy by either adding a seed paragraph, uploading new sources or reviewing more paragraphs to the classes that have less-than-desired accuracy. Adding or deleting attributes on the masterlist is also allowed.

How does the accuracy of the DataNeuron ALP compare to the state-of-the-art solutions?

<table>
<thead>
<tr>
<th>Difference in Accuracy</th>
<th>Difference in Labelled Data Used</th>
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</thead>
<tbody>
<tr>
<td>Within a 2% Margin when compared to the state-of-the-art models.</td>
<td>Using just 2% of the labeled data when compared to human-in-loop annotation.</td>
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</tbody>
</table>

What are the deployment options once the model is trained?

Users can either export the Masterlist and Training Dataset, export the model block through API or perform predictions on the ingested data. The predictions are a no-code service and can be done with just a click of a button!

Sign Up for a free access on dataneuron.ai today!

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