



# SOPHISTICATED PATTERN RECOGNITION

LIMFINITY<sup>®</sup> ML ENABLES YOUR LIMFINITY<sup>®</sup> SOLUTION TO RECOGNIZE PATTERNS AND MAKE PREDICTIONS BASED ON HISTORICAL DATA. UTILIZE THE POWER OF AN ARTIFICIAL NEURAL NETWORK TO MAXIMIZE EFFICIENCY AND REVOLUTIONIZE THE WAY YOUR LAB OPERATES.



## MACHINE LEARNING

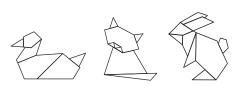
### WHAT IS MACHINE LEARNING?

Machine Learning algorithms use an artificial neural network to analyze historical data, creating a set of parameters called a "trained model." The trained model is then able to analyze new data, compare it to patterns it has already recognized, and make predictions based on what it has learned. Limfinity ML makes it much easier than ever before to set up a neural network, making it possible to apply this technology in your own laboratory.

### LEARNING: WHAT IS A CAT?



### APPLYING: IS THIS A CAT?



**PREDICTING:** 

THIS IS A CAT

THIS IS NOT





## WHAT ARE THE APPLICATIONS OF MACHINE LEARNING?

#### **DIAGNOSIS:**

Comparing test results to historical data and diagnoses allows the algorithm to flag a patient's results for further review, and help predict what diagnoses their results are consistent with.

### LOGISTICS:

Machine Learning can predict how many samples you are likely to recieve, and of which types, based on previous dates and times.

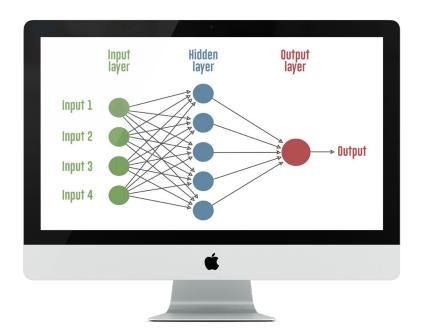
### QUALITY CONTROL:

Anomalous results, unusual patterns in sample processing, and other potential problems and errors can be easily recognized and flagged by a neural network without direct human interaction.



## MACHINE LEARNING & YOUR LAB

With Machine Learning for Limfinity<sup>®</sup> 7, it is possible to integrate trained machine learning models into new or existing Limfinity<sup>®</sup>-based solutions. Defining new models in Limfinity<sup>®</sup> ML is as easy as configuring input and output data fields. Configured and trained models capture relationships among many input fields with a given set of conditions, and this information can later be assessed to guide users in their decision making. Limfinity ML is built around super-fast, multilayer artificial neural network algorithms. In the past, neural networks were typically associated with specialized applications, developed only by select groups of experts, but Limfinity ML drastically simplifies initial configuration options and utilizes evolving topology training to make neural networks accessible and practical for more widespread use. Limfinity<sup>®</sup> ML is optimized for on-server performance, which minimizes memory footprint and CPU consumption, as well as ensuring the privacy of the data.



Limfinity<sup>®</sup> ML has the power to open doors for your laboratory. Learn how you can utilize this cutting-edge technology and the many other innovative aspects of the Limfinity<sup>®</sup> software platform by contacting RURO and requesting a demonstration.





## READY TO LEARN MORE ABOUT LIMFINITY® ML?

## FOR MORE INFORMATION, INCLUDING A COMPLETE LIST OF LIMFINITY® VERSION 7 CAPABILITIES, VISIT RURO.COM/PRODUCTS/LIMFINITY.

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#### REGULATORY COMPLIANCE:





