The Wolfram Approach to 
MACHINE LEARNING
Wolfram has pioneered highly automated machine learning—and deeply integrated it into the Wolfram Language—making state-of-the-art machine learning in a full range of applications accessible even to non-experts.

Use Wolfram Machine Learning to...

- Automate human-judgment tasks
  (medical diagnosis, quality control, emotion analysis, not safe for work, ...)

- Make decisions from large-scale data
  (sales forecasting, finding crime hotspots, consumer patterns, ...)

- Recognize or identify objects or categories
  (text, faces, brands, languages, ...)

- Automatically fill in extra or missing data
  (database completion, colorization, depth reconstruction, ...)

- Automatically tag elements in a large dataset
  (spam filtering, sentiment analysis, image classification, ...)

- Predict from historical data
  (projections, recommendations, logistics, ...)

- Develop new-generation efficient approximations
  (math function approximations, speeding up fluid dynamics, ...)

- Automate estimation tasks
  (geolocation, gender, age, ...)

- Create embedded intelligent systems
  (sensor loops, vision systems, ARM/Raspberry Pi, ...)

- Automate creative tasks
  (handwriting synthesis, painting synthesis, music synthesis, painting from drawing, ...)

- Create customized realistic imitations
  (speech synthesis, voice transfer, face transfer, computer graphics, ...)

- Build systems that automatically adapt
  (market conditions, consumer trends, continuous learning, ...)

- Identify clusters and trends in data
  (market segmentation, consumer trends, automatic visualization, ...)

- Standardize free-form or noisy data
  (autocorrection, audio denoising, image deblurring, outlier removal, ...)

- Teach about machine learning
  (industry, higher education, K-12)

- Research new machine-learning methods and analyses
  (visualization, domain-specific methods, neural network architectures, ...)

- Update classic algorithm domains using machine learning
  (signal processing, image processing, computational chemistry, control theory)

- Detect anomalies in data
  (computer security, fraud detection, system monitoring, ...)

and much more...
Integrated into your workflow
Through its deep integration into the Wolfram Language, Wolfram Machine Learning immediately fits into your existing workflows, allowing you to easily add machine learning anywhere.

Instant APIs
All Wolfram Machine Learning can immediately be deployed as web APIs, in the public Wolfram Cloud or in Wolfram Enterprise Private Clouds.

Develop & document in Wolfram Notebooks
Use award-winning Wolfram Notebooks to develop, document, store and share your machine-learning projects.

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Leverage prebuilt models and feature extractors
Dramatically reduce training times using Wolfram’s expanding library of models and feature extractors.

The Wolfram Language includes a wide range of state-of-the-art integrated machine learning capabilities, from highly automated functions like Predict and Classify to functions based on specific methods and diagnostics, including the latest neural net approaches. The functions work on many types of data, including numerical, categorical, time series, textual, image and audio.

Listing of superfunctions:
Explore the complete list of superfunctions: wolfr.am/ref-ml

Wolfram Neural Net Repository
Advanced neural networks, immediately computable

Building on the Wolfram Language neural net framework, the Wolfram Neural Net Repository provides a uniform system for storing neural net models in an immediately computable form. The repository is built to be a global resource for neural net models, including those from the latest research papers, as well as ones trained or created at Wolfram Research.

The ease of access and use of the repository on desktop, in the cloud or even on a mobile device brings unparalleled flexibility to training and deploying AI solutions to a wide range of problems in business research, data science, software development and beyond in labs, classrooms or enterprise.

Explore the latest neural net models: wolfr.am/nn-repo
Why Speak the Wolfram Language...

Underlying everything we do is the Wolfram Language. Designed for the new generation of programmers, the Wolfram Language has a vast depth of built-in algorithms and knowledge, all automatically accessible through its elegant unified symbolic language.

» Built-in Computable Knowledge
» World’s Largest Algorithmbase
» Document-Based Workflow
» High-Level Automation
» Instant Computable Knowledge
» Multiparadigm Language

» Integrated All-in-One Platform
» Symbolic-Numeric Methodology
» Broad Subject Coverage
» Universality of Platform
» Natural Language Integration
» Interactive Interfaces

Scalable for programs from tiny to huge, with immediate deployment locally and in the cloud, the Wolfram Language builds on clear principles—and 30+ years of development—to create what promises to be the world’s most productive programming language.

Get Started Immediately

Try it out yourself
Start a free trial of Wolfram|One and apply it to your own projects
wolfr.am/one

Machine-learning courses and tutorials
wolfr.am/u-ml

Elementary introduction to machine learning
wolfr.am/eiwl-22

Technical Services

Enlist the world’s computation experts to help with your project—any size, any level.

At Wolfram, we know what’s possible with computational technology because we are global leaders in creating it. That gives us an unprecedented depth of expertise in applying it to consulting work in a variety of fields.

Whether individual or enterprise, from concept to deployment, our computation experts can help you achieve robust results with less time and effort.

Get us started with your project today: wolfr.am/ts