

Custom Machine Learning Models

ENGINEERING

THE PROBLEM

Most companies sit on years of operational data that never informs a decision. Off-the-shelf AI tools do not understand your domain, and building a custom model in-house means standing up an ML research function most teams cannot staff.

WHAT WAS BUILT

- **Turns dormant data** into models that predict, classify, and score the outcomes that move the business
- **Custom models trained** on your own data and domain, not a generic API wrapped in a UI
- **Delivered deployment-ready: evaluated** on held-out data, exportable, and sized to run where you need it

CONTEXT & PROBLEM

Operational data piles up in logs, sensors, transactions, and records, but most of it never gets put to work. The signal that could forecast demand, flag fraud, or catch a failure early sits at rest.

General-purpose AI APIs are trained on the public internet, not your domain. They cannot classify your signals, price your products, or score your leads with the accuracy a purpose-built model reaches.

Building that model in-house takes ML research talent, data pipelines, evaluation rigor, and deployment engineering that most teams are not set up to assemble.

AI SOLUTION

We scope the outcome worth training toward, then build a model on your data: feature engineering, training, and honest evaluation against held-out data so the accuracy number actually means something.

The approach spans structured and unstructured inputs, from tabular records to raw signal streams, matched to the problem rather than forced through one generic tool.

Models are handed over deployment-ready: exported to run in your environment, including on the edge, with the evaluation and tradeoffs documented so you know exactly what you are shipping.

VALUE AT STAKE

Data that was sitting at rest becomes a working input to pricing, forecasting, detection, and quality decisions.

Accuracy is measured against held-out data and reported plainly, so performance is grounded rather than aspirational.

The output is a capability trained on your own data and owned by you, not a rented API every competitor can call.

Full video walkthrough available at deepvelocity.ai/custom-ml-models