



Postgres ML

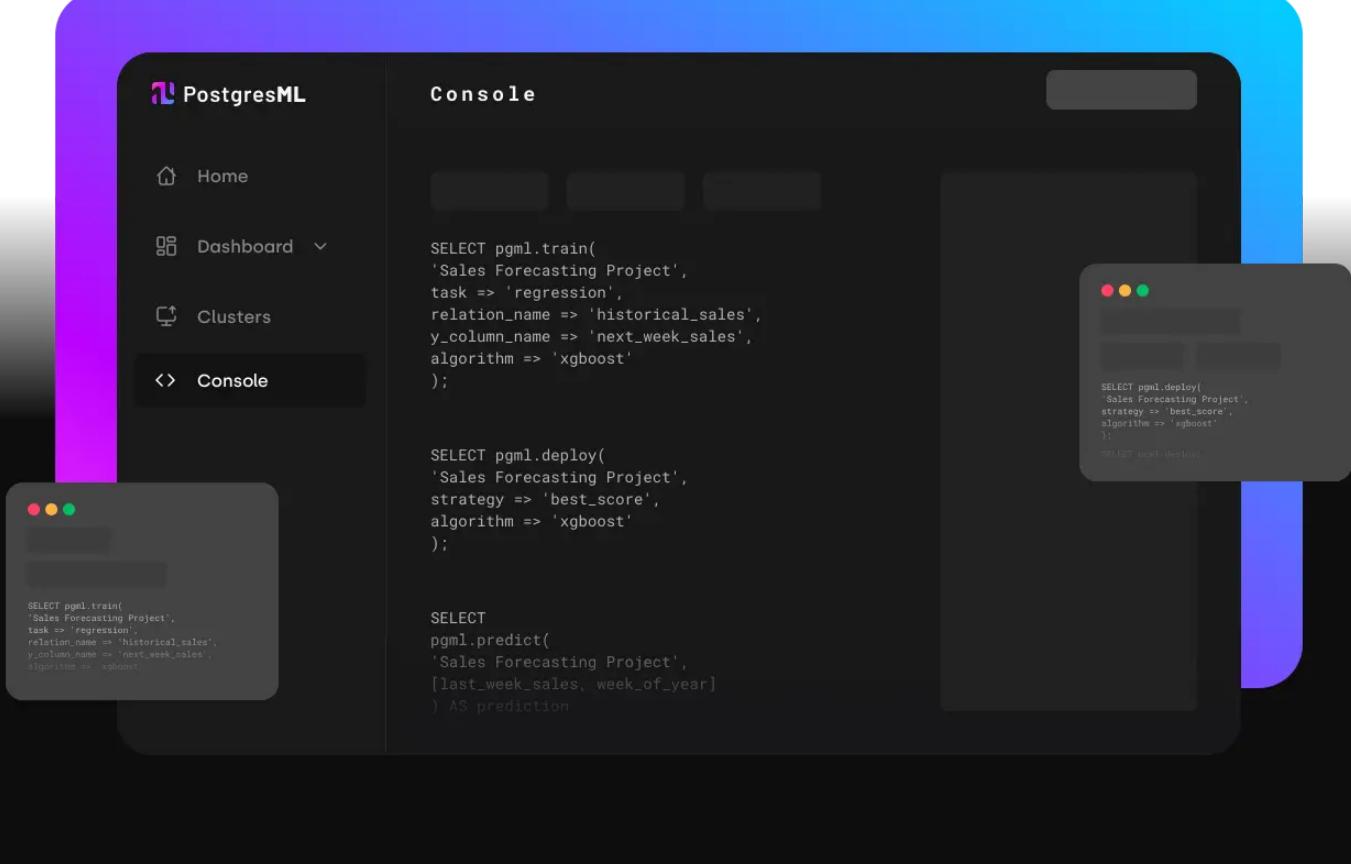
BETA

# on a Scalable Solution

Our open source software scales Postgres horizontally for your interactive AI powered applications, with the latest LLMs, vector operations, classical Machine Learning and good old Postgres application workloads.

Docs

**Get Started For Free**



# How It

Use the expressive power of SQL along with the most advanced machine learning algorithms and pretrained models in a high performance database.

PostgresML indexes application data alongside computed features like embedding vectors with your machine learning models all together in a seamless shared memory space. This eliminates network calls, process boundaries, data duplication and other unnecessary complexity, which makes it more reliable, efficient, fast and simple.

Our serverless platform is built around our custom Postgres pooler PgCat, which allows you to scale your inference layer to millions of predictions per second across multiple GPU accelerated machines.

Try Now For Free



## Fast

Up to 40x performance improvement over traditional microservice architectures. Shared memory between data and models in a single process eliminates network calls, process boundaries and data duplication.



## Comprehensive

PostgresML can download state-of-the-art open source models from HuggingFace, or train your own end to end. It also supports many algorithms like Torch, Tensorflow, XGBoost, LightGBM, and all the classical ones in Scikit.



## Scalable

Scale your inference layer to millions of predictions per second in our GPU accelerated cloud. Start for

free with our serverless option, or use dedicated Postgres replicas.



## Simple

PostgresML is your application and vector database, model store, feature store, inference server and ML deployment pipeline, with support for all major languages and application frameworks as clients.



## Your Data

Efficiently load data or features from upstream sources with Postgres replication, or connect your application directly through our custom load balancer, PgCat.



## Highly Available

Abstract everything behind a single connection string with smart query routing, sharding, and enterprise-grade managed infrastructure.

# How to



## Train

```
pgml.train(  
    task => ,  
    relation_name => ,  
    y_column_name => ,  
    algorithm =>  
);
```

[Learn About Training](#)



# Deploy

```
pgml.deploy(  
    ,  
    strategy => ,  
    algorithm =>  
);
```

[Learn About Deployments](#)



# Predict

```
pgml.predict(  
    ,  
    ARRAY[  
        last_week_sales,  
        week_of_year  
    ]  
)    prediction  
        prediction    ;
```

[Learn About Predictions](#)

# What

"Absolutely brilliant" on PgCat,  
our sharded PostgreSQL proxy.

Carnegie Mellon

"The improvement is quite  
remarkable" on PostgresML  
v2.0.

Scaling Postgre

# Start Now With Machine Learning

[Get Started For Free](#)

## Discover All



### Fastest Inference

PostgresML eliminates separation  
between your model server and



### All Your Favorite Algorithms

datastore, minimizing latency and computation costs. You can even generate embeddings on the fly in queries. Our benchmarks show a 8x-40x improvement over Python HTTP microservices.

Overview

Whether you need a simple linear regression or extreme gradient boosting, PostgresML includes support for all classification and regression algorithms in **Scikit Learn**, **XGBoost**, **LightGBM** and pre-trained deep learning models from **Hugging Face**.

Algorithms

**8x-40x**  
Faster than Python

Prediction Latency

QPS on EC2

# We Have the Perfect



PRIVATE ALPHA

**Serverless**

Starting at

\$0

For startups  
Free, without cache acceleration

**\$0.25/hr per GB GPU cache**

**Multi GPU burst capability**

**Cache your models on the GPU**

**Instant scalability up to 256GB GPU**

**Scale further with advanced sharding  
functionality**

**Get Started For Free**



PUBLIC BETA

## Dedicated

Starting at

**\$0.60/hr**

For orgs of any size  
Dedicated cluster with fixed hardware

**Choose CPU, RAM or GPU resources**

**Horizontally scalable inference with replicas**

**High availability for your production applications**

**Multiple users**

**Multiple databases**

**Automated Backups**

**Metrics**

**Logs**



CUSTOM TIMELINES

## Enterprise

Custom Pricing

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For orgs with custom needs  
Your hardware, your way

Customized hardware

Solution Architecture support

Private VPC/On-prem deployments

Access Control Lists

Single Sign-on

Contact Us



