Recommended Models

### **2. River: Adaptive Models**

[River](https://riverml.xyz/) is the best library for real-time online ML — especially in resource-sensitive environments like Kubernetes.

#### Suitable Models from River:

|  |  |  |
| --- | --- | --- |
| **Model** | **Purpose** | **Why it's great** |
| HoeffdingTreeRegressor | Adaptive trees | Captures nonlinear trends incrementally |
| AdaptiveRandomForestRegressor | Powerful ensemble | Great for mixed trends or variable load |
| ARIMA (time series) | Forecasting usage | For periodic trends (day/night patterns) |

Recommended as next-generation backend for TrendLearner