

# Crypto AI Hybrid v13 Setup Guide

## Overview

The Crypto AI Hybrid v13 system combines real-time buy/sell alert generation, spike prediction, AI model retraining, and telemetry management with automated cleanup. It runs every 30 minutes using GitHub Actions.

## 1. Repository Setup

- 1 Log in to your GitHub account and click **New Repository**.
- 2 Enter a name like **crypto-ai-hybrid-bot**.
- 3 Select Public or Private visibility.
- 4 Click **Create Repository**.
- 5 Upload the contents of **crypto\_ai\_hybrid\_v13\_package.zip** (including .github/workflows).

## 2. GitHub Secrets and Variables

Add Telegram and Email credentials as GitHub Secrets and Variables for secure use in workflows:

- **TELEGRAM\_TOKEN** – your bot API token.
- **TELEGRAM\_CHAT\_ID** – your chat or group ID.
- **EMAIL\_USERNAME** – Gmail address for fallback alerts.
- **EMAIL\_PASSWORD** – app-specific password (not raw password).

## 3. Workflow Schedule

The GitHub Actions workflow runs every 30 minutes to train models, evaluate signals, send alerts, and clean telemetry logs. The schedule is defined as:

```
cron: */30 * * * *
```

## 4. Key Components

- **train\_ai\_model.py** – trains hybrid AI and updates cache daily.
- **crypto\_ai\_alert\_v10.py** – generates buy/sell signals with spike predictor support.
- **spike\_predictor.py** – forecasts near-term spikes and dips.
- **telemetry\_cleanup.py** – removes logs older than max\_log\_age\_days.
- **config.json** – dynamic configuration (symbols, intervals, alert thresholds).

## 5. Running Locally (optional)

- 1 Install dependencies: **pip install -r requirements.txt**
- 2 Run training: **python train\_ai\_model.py**
- 3 Run alert logic: **python crypto\_ai\_alert\_v10.py**
- 4 Run cleanup manually: **python telemetry\_cleanup.py**

## 6. Telemetry and Dashboard

Telemetry data is stored in **telemetry\_logs/** and visualized via Streamlit dashboard. You can launch it locally using: **streamlit run telemetry\_dashboard.py**.

## 7. Cleanup and Retention

The telemetry cleanup step runs automatically at the end of every workflow execution. It removes JSON logs older than the configured retention period (default 30 days). Uploaded artifacts remain preserved for audit.

## 8. Recommended Customization

- Update **config.json** to adjust symbols, thresholds, or retraining intervals.
- Change **max\_log\_age\_days** to modify telemetry retention.
- Use **reason\_mode: adaptive** for detailed decision explanations in telemetry.
- Enable **use\_spike\_predictor\_in\_alerts** to incorporate spike forecasts in buy/sell logic.

### ***End of Guide***

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