

## **Auto Trading Agent**

Short Description: Fully automated trading system.

Trading Types: Currently supports long and short positions.

Smart Contract support:

QuickswapV3: <https://polygonscan.com/address/0xf5b509bb0909a69b1c207e495f687a596c168e12>  
AaveV3: <https://polygonscan.com/address/0x794a61358d6845594f94dc1db02a252b5b4814ad>

Test Wallet (No longer in use):

<https://polygonscan.com/address/0x7fdd111d9b39f9ae07f9075bea74cf44ba4e70a2>

### **1. OHLC data aggregation**

Short Description: Pricing data aggregation and persistence

Runtime Environment: The Graph

Query Language(s): GraphQL

Deployment Type: 3rd party API

### **2. Technical Analysis**

Short Description: Technical indicators (MACD, RSI, ATR, VWAP etc.) plus trading strategy calculations and signal generation (buy, sell, hold)

Runtime Environment: Python/Flask

Language(s): Python3.10

Libraries/Frameworks: Pandas, pandas-ta (Pandas Technical Analysis)

Deployment Type: Dockerized Container (Google Cloud Platform)

### **3. Signal Handling**

Short Description: Conversion of signals to trades (long, short, hold) and capital allocation

Runtime Environment: Javascript/Node.js

Language(s): Javascript

Libraries/Frameworks: ethers.js

Local Testing: Jest

Deployment Type: Serverless (Google Cloud Platform)

### **4. Trading API**

Short Description: Crypto wallet management and on-chain smart contract communication

Runtime Environment: Javascript/Node.js  
Language(s): Javascript  
Libraries/Frameworks: ethers.js  
Local Testing: Jest  
Deployment Type: Serverless (Google Cloud Platform)  
3rd Party RPC integration: Infura

## **5. Backtesting**

Runtime Environment: Python/Flask  
Language(s): Python3.10  
Libraries/Frameworks: Pandas, pandas-ta (Pandas Technical Analysis)  
Deployment Type: Local instance

## **Cloud Hosting**

Google Cloud Platform  
- Serverless functions (Firebase)  
- NoSQL Storage (Firestore)  
- Pub/Sub (Google Cloud Platform)

## **Local Development Tools**

Hardhat  
Firebase CLI Tools  
Firebase Emulator  
nodemon

## **Code Repository**

github