

# PPO Market Bot

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# New Environment

## Modifications

Added **5-minute tick** to the state space

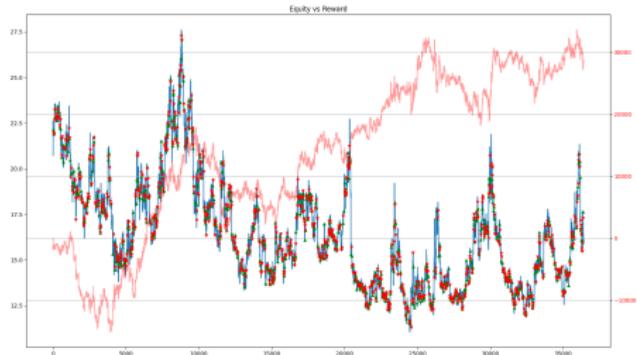
Enabled **short positions**

Optuna optimization on **max drawdown** and **average profit**

## Issues Encountered

**RAM saturation:** long training runs crashed the OS

**VRAM limitation:** sequence length reduced to **1 day** (288 samples)



# First results

## Training dataset



Figure 2: Agent performance on the training dataset



# First results

Model Training Result (threshold=0.65)	
total_reward	163,491,909
action_per_day	6
annual_return	0.29
average_profit	-0.08%
annual_volatility	22.92
sharpe_ratio	-0.90
max_drawdown	-1.49

Figure 3: Training phase results



# First results



Figure 4: Agent performance on the testing dataset



# First results

Model Testing Result (threshold=0.65)	
total_reward	3,960,964
action_per_day	4
annual_return	nan
average_profit	-0.186%
annual_volatility	195.909
sharpe_ratio	-0.240
max_drawdown	-1.547



# Thank You

