Summary

Strategy: · End: 2024-12-30 00:00:00 · Initial: 10000.0 · Equity: 13887.788195919456 · Portfolio: 13887.788195919456

```markdown
# Backtest Report

## 1. Summary
- **Start Date:** 2024-01-02
- **End Date:** 2024-12-30
- **Duration:** 363 days
- **Initial Investment:** $10,000
- **Final Equity:** $13,887.79
- **Absolute PnL:** $3,887.79
- **Percentage Return:** 38.88%
- **Annualized Return:** 39.06%

## 2. Strategy
- **Strategy Name:** MyStrategy
- **Description:** This strategy leverages simple market entry signals with the goal of capitalizing on
- **Parameters:** N/A (the strategy currently has no specific parameters implemented apart from a basic
- **Rationale:** The strategy was designed to initiate a long position whenever the market is favorable

## 3. Results

### 3.1 Performance Metrics
- **Return Metrics:**
  - Return [%]: 38.88%
  - Buy & Hold Return [%]: 36.52%
  - CAGR [%]: 25.61%

- **Risk Metrics:**
  - Volatility (Ann.) [%]: 31.29%
  - Sharpe Ratio: 1.25
  - Sortino Ratio: 2.76
  - Calmar Ratio: 2.56

- **Drawdowns:**
  - Max. Drawdown [%]: -15.26%
  - Avg. Drawdown [%]: -3.40%
  - Max. Drawdown Duration: 134 days
  - Avg. Drawdown Duration: 22 days

### 3.2 Trading Activity
- **Total Trades:** 0 (No trades executed)
- **Win Rate [%]:** NaN (Not applicable)
- **Profit Factor:** NaN (Not applicable)

### 3.3 Equity Curve
- **Visualization:** ![Equity Curve](URL_to_equity_curve_image) (placeholder for actual equity curve gra

- **Equity Data:**
  - **Equity Peak:** $14,261.56
  - **Equity at Drawdown:** $10,621.78
```

````
### 3.4 Trading Data
- **Trades Overview Table:**
    ```markdown
    | Size    | EntryBar    | ExitBar    | EntryPrice    | ExitPrice    | SL    | TP    | PnL    | Commission
    |--------|------------|-----------|--------------|-------------|------|------|-------|-------------
    | N/A    | N/A         | N/A        | N/A           | N/A          | N/A  | N/A  | N/A   | N/A
    ```

- **Trades CSV:**
    - (Empty DataFrame, no trades executed.)

- **Equity CSV:**
    - (Link or summary not applicable as there were no trades.)

## 4. Insights
- **General Observations:**
  - The strategy showed a strong overall performance, with a 38.88% return over the year, outperforming

- **Comparative Analysis:**
  - Comparing the strategy's performance versus the market benchmarks, the strategy outperformed the bu

- **Potential Improvements:**
  - Consider introducing more complex signal parameters or conditions to trigger trades, enhancing the
  - Analyze historical volatility to adjust position sizing dynamically, potentially improving risk mana

- **Limitations:**
  - The backtest period did not yield any trades, raising concerns about the effectiveness of the strat

## 5. Code
```python
from backtesting import Backtest, Strategy

data = get_ohlcv_data('AAPL', '2024-01-01', '2024-12-31')

class MyStrategy(Strategy):
    def init(self):
        pass

    def next(self):
        if not self.position:
            self.buy()

bt = Backtest(data, MyStrategy, cash=10000)
stats = bt.run()
print(stats)

# Emit structured artifacts for reporting
import json
try:
    # Trades preview table
    import pandas as pd
    print("TRADES_TABLE")
    print(stats._trades.head(20).to_markdown(index=False))
except Exception:
````
````

```
    pass

# Full CSVs for optional charts/tables
try:
    import pandas as pd
    print("TRADES_CSV"); print(stats._trades.to_csv(index=False))
    print("EQUITY_CSV"); print(stats._equity_curve.to_csv(index=False))
except Exception:
    pass

# Compact summary for TL;DR
try:
    end_date = str(stats.get('End', '')) or (str(data.index[-1].date()) if hasattr(data, 'index') and le
    equity_final = float(stats.get('Equity Final [$]', 0))
    initial_cap = float(10000)
    pnl_abs = equity_final - initial_cap
    pnl_pct = float(stats.get('Return [%]', 0))
    print("SUMMARY_JSON"); print(json.dumps(dict(
        end=end_date,
        initial=initial_cap,
        equity_final=equity_final,
        portfolio_final=equity_final,
        pnl_abs=pnl_abs,
        pnl_pct=pnl_pct
    )))
except Exception:
    pass
```

Conclusion

The current backtest highlights the effectiveness of the strategy in terms of return, but the lack of executed trades indicates a need for further evaluation and development. Future iterations of this strategy should focus on refining trade entry conditions while also introducing exit signals to maximize potential returns. Further analysis on market conditions during the backtest period could provide valuable insights for strategy enhancement. “‘