

Pairs Trading Strategies

the Optimization in Decision-making Processes

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A Combination of All Stages' Optimization.

Decision-Making Processes in Pairs Trading

- 1 Pairs Selection
- 2 Hedge Ratio & Spread Calculation
- 3 Optimal Training & Stop-Loss Boundaries
- 4 Performance Measure
- 5 ...

Different Stages, Several Methods to Optimize!

Stage 1

1. PCA
2. Machine Learning
3. Correlation
4. Empirical Criteria
5. ...

Stage 2

1. OLS
2. Kalman Filter
3. ...

Stage 3

1. Reinforced Learning
2. DQN
3. ...

Stage 4

1. Profit
2. Drawdown
3. Sharpe Ratio
4. ...