### Slide 1: Fund Overview and Description

- Fund introduction
- Mission statement
- Objectives

No visualization needed on that slide

### Slide 2: Market Focus & Opportunities

- Why IT sector? E.g. fundamentals, volatility-prone sector
- Opportunities:
  - Exploit cointegrated pairs for mean-reverting trades
  - Capture alpha regardless of broader market direction

Plots: comparing IT sector dynamics vs main sector of S&P, maybe correlation charts

# Slide 3: Strategy Creation

- Explain Methodology and Rules:
  - How we identify pairs and test
  - How we optimize parameters, rolling window size, and define weighting
  - Execution Rules: Stop-loss threshold and rebalancing conditions

Plots: Include practical flowchart showing different steps for trade (e.g. showing data -> correlation analysis -> cointegration -> strategy implementation)

### Slide 4: Our Advantage

• Think about a few key differentiators here

### Slide 5: Management & Execution

- Trade Monitoring (daily) and rebalancing frequency (monthly), weighting scheme
- Execution: we consider high volumes stocks to minimize slippage and costs

#### Slide 6: Risk Management Framework

- Risk Controls: max drawdown limits and stop loss order
- Confirming indicators (i.e. rolling z-score of the spread)
- Execution Considerations: transaction costs accounted for in backtest and liquid IT stocks selected

### Slide 7: Trade Lifecycle Example (for best pair)

- Example Chart:
  - o Show the spread over time

o Mark entry/exit points on the graph

Visualization: Include line charts of spread and highlighted buy/sell signals cf. Nick's plots)

### Slide 8: Strategy Performance

- Compare returns of our strategy against stat arbitrage index (e.g. BHSTA)
- Display key metrics and maybe other ones like percentage of winning/losing trades, winning/losing run, equity drawdown etc

*Visualization: monthly and annual track records snapshots* 

## Slide 9: Backtesting Results

- Backtest Period:
  - o 5 years total: 3 years training, 1 year testing, 1 year live trading
- Results:
  - o Equity curve: Strategy vs. XLK
  - Stress Testing: Performance during volatile periods (e.g., COVID)

Visualization: Equity curve, etc

### Slide 10: Performance Attribution & Return Decomposition

- Attribution Analysis:
  - O Alpha & Beta: Regression vs. XLK (highlight positive alpha, low beta)
  - Pair Contributions: Identify top contributors to returns
- Return Decomposition:
  - Components: Allocation (benchmark-driven), Selection (alpha + residual)
  - o Cumulative Returns: Total vs. benchmark allocation vs. residual

### Slide 11: Conclusion & Next Steps

- Key Takeaways
- Scalable strategy with potential for broader sector applications?

Think about all the plots to have for the presentation