

Stakeholder One-Pager: Short-Term Futures Price Prediction

Audience: Junior traders on the futures desk

Decision cadence: Intraday, every 1–5 minutes

Pain points: Reliance on subjective setups, missed reversals, difficulty quantifying probability of success

Proposed output: Directional signal (+1 long, 0 hold, –1 short) with confidence score, updated in near real time, delivered via dashboard/API

Assumptions: Live tick/order book data feed available; latency under 1s; explainable ML approach

Constraints: Prediction runtime $\leq 500\text{ms}$; integration with existing charting workflows

Risks & Mitigations: Macro regime shifts, sudden illiquidity, or data outages — mitigated with fallback to simple technical indicators

Success metrics: Sharpe ratio improvement ≥ 0.3 over baseline; hit rate $\geq 55\%$ on directional calls over rolling 2-week window