KHUSHAL JAIN

FinTech Developer & Technical Analyst | Indian Equity & Derivatives Markets

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PROFESSIONAL SUMMARY

FinTech developer and technical analyst with 7+ years in Indian equity and derivatives markets at Thar Share Brokers. B.Tech in Computer Science Engineering with hands-on experience in charting, derivatives data analysis, risk management and trade execution, combined with Python, TypeScript and React development. Built and open-sourced 10+ trading and market-data tools, including an AI-native NSE stock screener, a multi-agent research dashboard, an option chain analytics terminal, a Pine Script toolkit and a market news terminal. Publishes educational trading content on TradingView.

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, Pine Script, SQL, R, C++, HTML5/CSS3

Frameworks & Libraries: Streamlit, FastAPI, React, Next.js, Node.js, Flask, Django, Tailwind CSS, Pandas, NumPy, TA-Lib, YFinance, Scrapy

Data & AI: Machine Learning, LLM Integration (Groq, Ollama), Multi-Agent Systems, MCP Servers, Backtesting, REST APIs, Web Scraping, Pytest

Databases: MySQL, PostgreSQL, MongoDB

Tools & Deployment: Git, GitHub, GitHub Actions (CI), Docker, Linux, Postman, Jupyter, VS Code, Netlify, Vercel, Render, Streamlit Cloud

Markets & Finance: Technical Analysis, Equity & Derivatives (Options, Futures), Option Chain Analysis, Greeks, Max Pain, Risk Management (VaR/cVaR), Hedging, Trade Execution, P&L Monitoring, Forex

WORK EXPERIENCE

Technical Analyst | Thar Share Brokers Private Limited, Jaipur **May 2019 - Present**

- Analyse Indian equity and derivatives markets using advanced charting techniques and derivatives data to identify trading opportunities.
- Execute trades and monitor P&L with risk management and hedging discipline across equities, options and futures.
- Apply Python and data tooling to build in-house screeners, option chain analytics and strategy back-tests.

Junior Software Intern | Thar Share Brokers Private Limited, Jaipur **Apr 2018 - May 2019**

- Started as a software intern and moved into the Technical Analyst role in May 2019.

PROJECTS

Research Copilot Dashboard | *Python*, *Groq LLM*, *Multi-Agent*

- Multi-agent stock research dashboard: a bull agent and a bear agent debate using market filters, and a manager agent makes the final call. Covers NSE, BSE and Sensex.
- Being upgraded to a professional version inspired by the open-source TradingAgents framework.

KJStockScreener (v3.0.2) | *Python*, *Streamlit*, *Groq LLM*, *MCP* github.com/85599/KJStockScreener

- AI-native NSE stock screener with breakout scans, live option chain and an AI trading agent (Groq LLM); Kite MCP broker connectivity and real-time NSE data. Live demo: kjstockscreener.streamlit.app.
- Built a Market Pulse module from NSE endpoints: IPOs, FII/DII flows, bulk/block deals, F&O ban list and shareholding patterns.
- Converted the Gap Prediction ML model to pure NumPy, removing the TensorFlow dependency (Python 3.13 compatible).

MarketMitra AI | *Python*, *FastAPI*, *React*, *Vite*, *Docker* github.com/85599/MarketMitra-AI

- Multi-asset dashboard (stocks, indices, crypto, forex, commodities) with live NSE option chain, IV smile, max pain, strategy payoff builder, market scanner and sector heatmap.
- Trains a 5-net MLP ensemble per request and back-tests it on the last 60 days to report 1/5/10-day forecast ranges with measured direction accuracy and MAPE.
- Backed by 58 offline tests, Docker packaging and a GitHub Actions CI pipeline.

MITTI::TERMINAL (mitti-markets) | *Next.js*, *React*, *TypeScript*, *Tailwind*, *Scrapy* github.com/85599/mitti-markets

- News terminal for Indian markets with live indices ticker, a 60-day news wire and NSE/BSE symbol-level quotes and news; runs with no API keys.

- Scrapy-based scraper feeds the wire; stale news auto-expires after 60 days.

OptionChainPro | *Python*, *Streamlit*, *Pytest* github.com/85599/optionchainpro-terminal

- NIFTY 50 option chain terminal: CE/PE LTP, OI, volume, IV, Greeks, Max Pain, PCR, support/resistance, ATM straddle expected move, IV skew and CSV export.
- Estimates spot price using put-call parity; analytics core covered by 28 unit tests.

MarketSutra | *Python*, *Streamlit*, *Yahoo Finance* github.com/85599/MarketSutra

- Live technical and fundamental terminal for NSE stocks, Bitcoin and crude oil: RSI/MACD/SMA 200/golden cross screener, candlestick charts, fundamentals, news feeds and a position-size calculator. Live on Streamlit Cloud.

KJScreener | *Python*, *Streamlit*, *Ollama (Llama 3.2)* github.com/85599/kjscreener

- Menu-driven NSE stock screener with technical scanners, reversal signals, strategy backtesting engine, trading alerts and local AI-powered market insights.

PineSprout Studio | *Python*, *CLI* github.com/85599/pinesprout

- Pine Script v5/v6 toolkit for TradingView developers: linter, formatter, v4 to v6 upgrader, AI-powered code analysis and docs generator.

NIFTY & BankNIFTY Golden Ratio Strategies | *Python*, *Bokeh* github.com/85599/nifty-golden-pivot-strategy

- Intraday strategies using Classic Pivot Points and Golden Ratio breakout levels; BankNIFTY Golden Number = ((Prev Day High - Prev Day Low) + first 10-minute opening range) x 61.8%, with defined stop-loss and target rules.
- Designed for automation through broker algo-trading APIs (Zerodha, Upstox, Fyers and others). Also published as github.com/85599/BankNIFTY-Golden-Ratio-Strategy.

Confluence-Based Indicator | *Pine Script*, *TradingView* github.com/85599/Confluence-Based-Indicator

- Premium TradingView indicator that combines multiple signals into one confluence view for traders who need precision and speed.

CONTENT & OPEN SOURCE

- Publish educational market analysis and Pine Script content on TradingView (in.tradingview.com/u/khushaljain023).
- Maintain open-source trading and finance projects on GitHub (github.com/85599).

EDUCATION

B.Tech, Computer Science Engineering | Yagyavalkya Institute of Technology, Jaipur **2018**

Senior Secondary (Class XII), PCM | Prem Shanti Public School, Jaipur **2014**

Secondary (Class X) | Prem Shanti Public School, Jaipur **2012**

CERTIFICATIONS

- Machine Learning with Python - IBM (cognitiveclass.ai)
- CS50's Web Programming with Python and JavaScript - Harvard (edX)
- Advanced JavaScript - Udemy
- Learning Python - LinkedIn Learning