

Harnessing the Power of AI in Finance: Opportunities and Challenges

By Raghavkumar Parmar

Al Opportunities







Data Collection

Al can help speed up process of data extraction and data augmentation Al can help parse through vast amount of data and analyze it fasten process of decision making

.

Data Analytics

Automation

Al can take over repetitive tasks in finance like loan processing, fraud detection and personalized marketing to improve efficiency

AI has immense potential to transform finance through data collection, data analytics and process automation.

AI Application in Finance

Fine-tuning Algorithms	Portfolio Management	Risk Management
Using AI to fine tune Algos which	Optimizing portfolios and making	Detecting financial risks and
can be used to make faster trading	data-driven investment decisions	anomalies using machine learning
decisions	using Al	algorithms
Fraud Prevention AI can flag potentially fraudulent transactions for further investigation, helping to prevent fraudulent activity before it occurs	Regulatory Compliance Automating regulatory processes and ensuring compliance using natural language processing	Credit Scoring Assessing creditworthiness of customers using predictive analytics and machine learning models

Uses cases of AI at Hedge Funds

Web Scraping

Using AI to scrape the internet to gather data which can be used for making trading decisions

Data Analytics

Using real-time data from Web data scrape to update financial models real-time

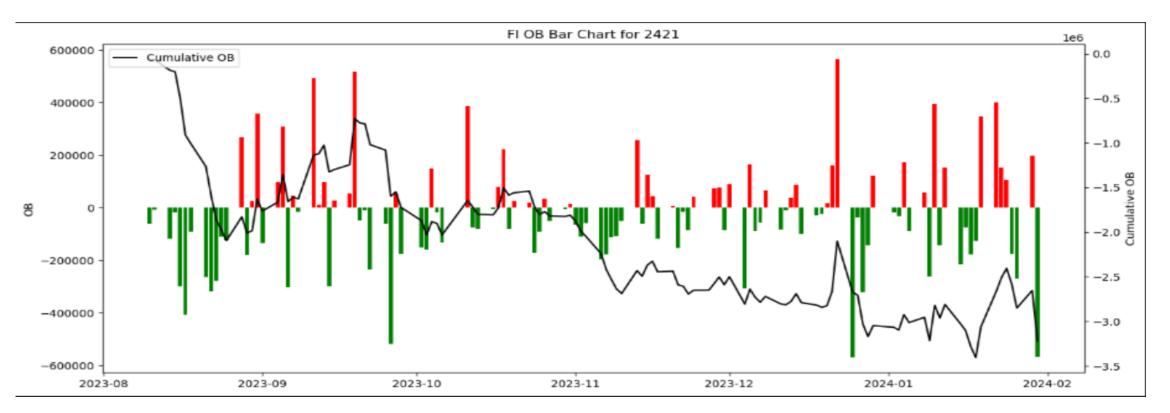
Back-testing

Using historical positioning data to back-test scenarios like short squeeze and margin recall

cruiseLine	startingPrice	exclusiveOffers	saleDetails	title	description	expiration	link
Royal Caribbean Cruises	From \$269	Our Royal Exclusive: Free Specialty Dinner for 2	48-Hour Flash Sale: Up to \$600 Instant Savings	Double Bonus Offer	\$50 – \$3,000 Extra When You Book With Us		
Royal Caribbean Cruises	From \$269	Our Royal Exclusive: Free Specialty Dinner for 2	48-Hour Flash Sale: Up to \$600 Instant Savings	No Interest or Approval	Book with No Cruise Payment Due Today		
Royal Caribbean Cruises	From \$269	Our Royal Exclusive: Free Specialty Dinner for 2	48-Hour Flash Sale: Up to \$600 Instant Savings	Our Royal Exclusive	Free Specialty Dinner for 2		https://www.cruises.com/results.do? places=C%2CBH%2CBM&days=3%2C4%2C5&c=44&sort_by=7&d=04/01/ 2024&d2=11/30/2024

Back-testing Output

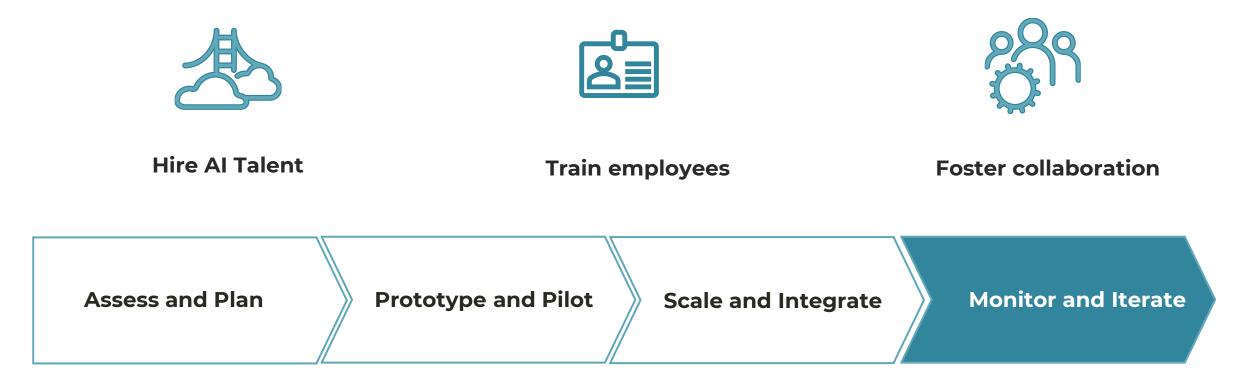




AI Challenges

Algorithm bias	Lack of explainability	Data-privacy
Ensuring Al-driven decisions do not perpetuate biases or discriminate against individuals or groups.	Ensuring interpretability and transparency in AI models is essential for regulatory compliance and stakeholder trust	Protecting customer data and respecting individual privacy in the age of AI-powered financial services

Building AI Capability and Implementation Roadmap



Building internal AI capability through training, hiring, and collaboration will enable financial institutions to effectively adopt AI.

Questions