

# HEET MEHTA

New York, NY | +1 (929) 317-5246 | [hnm1@fordham.edu](mailto:hnm1@fordham.edu) | [linkedin.com/in/heetnirajmehta](https://www.linkedin.com/in/heetnirajmehta) | [github.com/Heetm77](https://github.com/Heetm77)

## TECHNICAL SKILLS

- **Software Skills:** Python, SQL, HTML, CSS
- **Other Technical Skills:** Derivatives Pricing (Black Scholes Model), Value-at-Risk (VaR) Analysis (Monte Carlo Simulation), Back-testing, Object Oriented Programming (OOP), Linear Regression, Random Forest
- **Tools and Technologies:** MS Excel, MS Word, MS PowerPoint, Git, Bloomberg Terminal, Kaggle

## EDUCATION

### FORDHAM UNIVERSITY, GABELLI SCHOOL OF BUSINESS

New York, NY

#### MS, Quantitative Finance Student, Dean's Scholarship Recipient

August 2025 – December 2026

- Relevant Coursework: Derivatives, Financial Markets and Modeling, Financial Programming, Machine Learning and Econometrics, Probability and Statistics, Math for Quantitative Finance, Introduction to Stochastic Calculus
- Member of the Quantitative Finance Society, Investments Club, and Capital Markets Club

### CALIFORNIA STATE UNIVERSITY, SAN BERNARDINO AND

Ahmedabad, Gujarat, India

#### AHMEDABAD MANAGEMENT ASSOCIATION (Joint Degree)

July 2024 – May 2025

#### Post Graduate Diploma, Financial Management

- Relevant Coursework: Risk Management, Capital Budgeting, Mergers and Acquisitions (M&A), Financial Statement Analysis, Personal Finance, Foreign Exchange

### INDUS INSTITUTE OF TECHNOLOGY AND ENGINEERING

Ahmedabad, Gujarat, India

#### Bachelors, Computer Science and Engineering, GPA 3.57/4.00

September 2020 – April 2024

- Relevant Coursework: Linear Algebra, Calculus, Differential Equations, Data Science
- President of the Sports Committee; organized inter-college soccer tournament with 12+ universities across the city

## EXPERIENCE

### SHAGUN WEALTH

Ahmedabad, Gujarat

*Personalized financial services firm empowering 500+ individuals and businesses*

May 2024 – June 2024

#### Intern, Portfolio Management

- Participated in managing 10 portfolios for high-net-worth clients by analyzing NAV trends, and assessing portfolio beta
- Managed clients portfolios totaling \$500M AUM through short and long term mutual fund transactions
- Gained hands-on experience with tools like NSE/BSE trading terminals to track real-time market movements

### SILVERTOUCH TECHNOLOGIES LIMITED

Ahmedabad, Gujarat

*Innovative IT solutions company with 2,000+ clients worldwide*

January 2024 – April 2024

#### Project Intern, Software Development

- Collaborated with a team of four to develop a front-end flight booking system using Flutter, Dart, HTML, and CSS
- Led development of key modules and coordinated task assignments, ensuring project completion within three months
- Improved load speed by 30% and reduced booking effort by 40% through widget rendering and input automation

## PROJECTS

### IMPLIED VOLATILITY SURFACE AND ARBITRAGE DETECTION

- Built a real-time volatility surface dashboard using the Black-Scholes model and live market data from yfinance
- Computed implied volatility for European call options across multiple strikes and maturities
- Detected butterfly arbitrage and visualized 3D IV surfaces and smiles using Plotly and Streamlit

### EXOTIC DERIVATIVES PRICING AND SENSITIVITY ANALYSIS USING MONTE CARLO SIMULATIONS AND FINITE DIFFERENCE METHODS (PYTHON)

- Designed and executed Monte Carlo simulations (10,000+ iterations) using the Euler-Maruyama method to price exotic options, achieving accurate pricing for Asian and Lookback options. Applied risk-neutral valuation to compute the expected payoffs and discounted present values, improving pricing accuracy
- Conducted sensitivity analysis with Finite Difference Methods to compute Greeks (Delta, Gamma, Vega, Theta)
- Analyzed the effect of market parameters, demonstrating that a 25% increase in volatility resulted in a 60% rise in Lookback Call prices and a 40% increase in Asian Call prices

## ADDITIONAL

- Languages: English/Fluent, Hindi/Intermediate, Gujarati/Native
- Interests: Cooking diverse cuisines and hosting dinner gatherings to share food and bring people together