Training Notification Form, IIT Delhi

Company Overview

Name:	Barclays
Website:	http://www.home.barclays
Company Type:	Finance
Description:	Barclays is a British universal bank. We are diversified by business, by different types of customers and clients, and by geography. Our businesses include consumer banking and payments operations around the world, as well as a top-tier, full service, global corporate and investment bank, all of which are supported by our service company which provides technology, operations and functional services across the Group.

Project Details

Designation:	Quantitative Researcher Intern
Type:	Finance
Location:	Noida
Project Details:	About Statistical Modelling and Development

The Statistical Modelling and Development team remit lies within the trading activities in the Markets division, in particular electronic trading activities. It is responsible for
• Algorithms and model based business logic used in electronic trading in Markets.
• Data Science applied to trading and sales activities
• Underlying technology used in electronic trading and Data Science

The primary purpose of electronic trading is to provide liquidity to clients on agency and principal basis, where either the connection to the client is electronic or provision of that liquidity requires electronic trading. This requires the analysis, research and development of proprietary algorithms and trading business logic using data mining and statistical techniques.

The business logic includes information extraction from market data, price formation, auto-hedging, algorithmic risk management, execution strategies and smart-order-routing.

The primary purpose of the Data Science work is to extract information from our trading and market data to feed into decision making and algorithm design.

The instruments that we currently cover include Equities, FX Spot, Government Bonds, Corporate Bonds, Rates Futures, Rates Swaps, NDFs and CDS indices.

Overall purpose of role
As an Electronic Trading intern, you'll take your first steps in the extremely challenging and fascinating world of algorithmic trading & data science. Working with a broad spectrum of colleagues, you'll learn how data science fits into our

business. What's more, you'll help our team to turn mathematical and algorithmic ideas into trading reality.

How you'll develop
From beginning to end, we'll do everything in our power to make sure you get the most from your internship.
We'll surround you with challenging projects and opportunities to grow and learn.
We'll keep you motivated with encouragement, feedback, and support as you build your leadership skills, technical know-how and business acumen.
We'll help you connect with mentors, and network with colleagues and senior leaders alike.

Key Accountabilities

o Examine market trends and trading workflows to propose new or improved algorithmic trading strategies.
o Researchers achieve this using advanced mathematical and statistical techniques to understand data and build models.
o Research and develop pricing algorithm model for FX/Rates/Credit/Equities space
o Design of frameworks and functionality for development of trading algorithms
o Analysis of and improvements to algorithm performance
o Participation in team peer reviews of code, modelling and testing
o Participation in team knowledge sharing and presentations

Stakeholder Management and Leadership
This role involves significant interaction with our partners in Product, Trading, Technology, Sales, Compliance and Risk. It may involve direct interaction with clients. The ability to work and communicate across diverse teams is essential.

Risk and Control Objective
Take ownership for managing risk and strengthening controls in relation to the work you do. Ensure that all activities and duties are carried out in full compliance with regulatory requirements, Enterprise Wide Risk Management Framework and internal Barclays Policies and Policy Standards.

Person Specification
Personal attributes essential to performing role including competencies, expertise, knowledge, and experience. Note: experience requirements must not be in the form of years (minimum or otherwise).

Essential Skills:
The role is ideally suited towards someone who has:
 Strong Mathematics and Statistics skills
 Excellent Data Analytics and problem solving skills
 Strong Scripting skills and enjoys driving analytical insights from very large data sets.

The candidate must have:
o Good Object Oriented Programming skills in Python or Java or C++
o Familiarity with UNIX/LINUX environment
o Strong analytical skills
o Eye for details
o Excellent communication skills
o Flexible to work long hours when required

Preferred candidate:
o Having good understanding of Stocks and Trading
o Exposure to Data Science, Machine Learning, Model development

PPT will be conducted virtually.
Candidates with CGPA 7.5 and above are eligible.
Candidates with Major in Mechanical engineering and Minor comp science are eligible.

Stipend Details

Stipend:	200,000 INR Per Month
Accommodation:	No
Travel Expenses:	No

Selection Process

Resume Shortlist:	Yes
Written Test:	No
Online Test:	Yes
Group Discussion:	No
Personal Interview:	Yes
No. of Offers:	2

Eligibility

Diversity Recruiting:	No
Eligible Years:	Graduating in 2025 (Pre-Final Year Students) - B.Tech / Dual / Master's
Eligible Departments:	B.Tech in Computer Science & Engineering, B.Tech in Electrical Engineering, B.Tech in Electrical Engineering (Power and Automation), B.Tech in Mathematics & Computing, B.Tech in Mechanical Engineering