

# Quantitative and Technical Roles at Goldman Sachs India

## About Goldman Sachs

Goldman Sachs is global investment banking, securities and investment management firm. We provide a wide range of services to a substantial and diversified client base that includes corporations, institutional investors, governments, non-profit organizations and high net worth individuals. Our headquarters are in New York and we maintain significant offices in London, Bangalore, Mumbai, Tokyo, Hong Kong and other financial centers around the world.

## About Our Quantitative and Technical Roles

Goldman Sachs is a world leader in developing quantitative and technological solutions to complex business problems. Working side by side with the firm's trading, sales and investment management professionals, our quantitative and technical professionals use their training to create financial products, advise clients on transactions, measure risk and identify market opportunities.

## Job Responsibilities

Candidates would be required to work on a wide range of problems, including the following:

- **Developing and validating quantitative models used:**
  - 1) to calculate the fair value of financial contracts (securities and derivatives);
  - 2) to measure, analyze and manage the risks in our businesses (market, counterparty credit, operational, funding and liquidity risks as well as legal, regulatory and reputational risks);
  - 3) to execute trades and make markets electronically in equity and fixed income products; and
  - 4) to create trading strategies, portfolio analytics and risk management tools for the firm's mutual funds, hedge funds and private wealth clients.
- **Designing and developing sophisticated software and systems using proprietary as well as modern web, mobile, and, desktop technologies:**
  - 1) to manage, visualize, and analyze massive sets of market and operational data used in our trading, risk management, and control functions
  - 2) to correctly and efficiently route orders for billions of dollars of securities every day;
  - 3) to allow the ability to represent, transact in and risk manage all of the firm's OTC derivative positions; and
  - 4) to distribute computations across tens of thousands of computers.
  - 5) to make use of functional programming paradigm and big data solutions to develop firm's next generation modeling, pricing, and risk management platform
  - 6) to contribute to key open source initiatives – e.g. GS Collections, Project Panama
  - 7) to build firm's strategic mobile platform

## Qualifications

We are interested in applicants who possess skills in several of the following areas:

**Mathematics:** probability and statistics, differential equations, time series analysis, Monte Carlo methods, data mining, machine learning, regression and other numerical techniques.

**Computer Science:** strong fundamentals in distributed systems, databases, design and analysis of algorithms, implementation of programming languages and run-time systems.

Knowledge of finance, stochastic calculus and financial models is not required.

Currency Type (INR)

CTC [annual Income]*	Gross Taxable Income [Annual Income]*	Fixed pay [Monthly Income]*	Others
36,50,000 (Including one time payment of 7,00,000 and Supplemental Salary of 6,50,000)	36,50,000 (Including one time payment of 7,00,000 and Supplemental Salary of 6,50,000)	2,45,833 (Including the supplemental Salary)	supplemental salary is an accrued bonus paid out in monthly installments pro-rated from the date of joining, this is only applicable during the first year of joining