

# Aditya Divekar

Bendheim Center for Finance, 20 Washington Road, Princeton, NJ

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## EDUCATION

### Princeton University

*Masters in Finance*

Princeton, NJ

Aug 2021 - May 2023

Anticipated Coursework: Fixed Income, Asset Pricing, Financial Econometrics, Options Futures and Derivatives, Behavioural Finance, Asian Capital Markets, Machine Learning and Pattern Recognition

### Indian Institute of Technology Guwahati

*Bachelor of Technology, Mathematics and Computing, GPA: 9.18/10*

Guwahati, IN

June 2014 - May 2018

Coursework: Modern Algebra, Monte Carlo Simulation, Financial Engineering, Probability theory and Random Processes, Stochastic Calculus, Matrix Computations

## WORK EXPERIENCE

### Fusion Research Capital

*Quantitative Researcher/Developer*

Pune, IN

Mar 2021 - Aug 2021

- Designed and built a momentum trading strategy for index options at NSE based on order book and index future signals
- Monitored live trading and performed comparative analysis of trades with backtests to improve profitability and reproducibility
- Developed understanding of market microstructure and design techniques for low latency systematic trading

### Goldman Sachs

*Associate, Equities One Delta Strategies - Americas*

Bengaluru, IN

Jun 2018 - Mar 2021

- Worked on Smart Order Routing algorithms for options and equities. Developed spread option pricing constraints and trading dual-currency listings on Canadian exchanges that increased business flow by over multi-million dollars YoY
- Involved in building Atlas, a low latency trading infrastructure. Included design and implementation of execution algorithms and venue connectivity with emphasis on zero-garbage and low latency
- Independently calibrated and maintained venue rankings for passive routing across exchanges and dark pools
- Promoted to Associate in December 2020

### Goldman Sachs

*Summer Analyst, Equities One Delta Strategies - Americas*

Bengaluru, IN

May 2017 - Jul 2017

- Analysed historical executions of trading algorithms and developed performance metrics
- Implemented improvements for warm-up of algorithms reducing their startup time by 20% resulting in lower implementation shortfall

### Google Summer of Code

*Student Developer*

Remote

May 2016 - Aug 2016

- Designed and developed the implementation of the Authenticated Received Chain protocol for email authentication and security in GNU Mailman
- Participated in onsite development with the GNU Mailman team at the Portland Pycon, 2016 on invitation for collaboration

## PROJECTS & RESEARCH

### IIT Guwahati Department of Mathematics

Guwahati, IN

### Corporate Credit Rating using Machine Learning Techniques: Thesis

Jul 2017 - May 2018

- Designed predictive AI models to assign credit ratings based on financial fundamentals and performed comparative analysis with classification techniques
- Identified 12 key factors influencing credit ratings for US companies using S&P data for 400 companies spanning 6 years
- Achieved a benchmark accuracy of 92.13% with a novel approach of kNC compared to existing literature

### Slice Sampling with Adaptive Multivariate Steps

Mar 2016 - Apr 2016

- Studied and implemented the Shrinking Rank method for sampling from multivariate distributions
- Achieved improvement of 8% in accuracy over Slice Sampling for generating random variates from multivariate Gamma distribution

## SCHOLASTIC ACHIEVEMENTS

**Quant Market Volatility Modeling Challenge:** Ranked 3rd in the Quant challenge for the pricing of Barrier options in Quantify 2017, conducted by Goldman Sachs

**INSPIRE scholarship:** Awarded by the Department of Science and Technology, Govt. of India in 2014 for graduating within 1% of science students across high schools in India

## SKILLS & INTERESTS

**Programming:** Java, C++, Python, R, MATLAB

**Interests:** Motorsports, Poker, Weight training