

TANYA GUPTA

Indian Institute of Technology Bombay, 2020
B.Tech + M.Tech in Mechanical Engineering
Minor: Computer Science and Engineering

CPI: 8.53 / 10

Email: mjtanyagupta@gmail.com

Phone: +91 9833924290

LinkedIn: [/tanyagupta10](https://www.linkedin.com/in/tanyagupta10)



INTERNSHIP EXPERIENCES

DEUTSCHE BANK GLOBAL MARKETS DIVISION, MUMBAI

Advisory Team, Asia Pacific Desk May'18 - Jul'18

- Developed a **Client Solution tool**, supported by **excel VBA** for opportunity identification, custom analysis and derivative pricing of hedging solutions for all Asian currencies vs USD and EUR
- Implemented custom **Value at Risk** and **correlation matrix** analysis for **6 billion USD** deal with **Xiaomi** to compare geographical risk exposures prior to its Initial Public Offering
- Deployed **Cost Savings Analysis** on a 1 billion USD deal with **Merck**, for the onshore and offshore curves
- Researched historical and implied **volatilities** and utilized **Black Scholes model** for **pricing currency pair** call and put options
- Tool increased efficiency by **25%** when benchmarking companies

INDIAN SCHOOL OF BUSINESS, HYDERABAD

Research Intern, Centre for Analytical Finance May'17 - Jul'17

Received **Letter of Recommendation** from director, CAF

- Devised algorithms in **Python** and **VBA** to analyze and implement five **trading strategies** in the Indian Equity Markets
- Calculated **complexity** of FTSE800 reports, performed **sentiment analysis** and incorporated results in WordCloud using **R**
- Evaluated **related party transactions** with respect to Corporate Governance standards and violations in India, recommendations from this research included in final report to the **SEBI Committee**

GREAT EASTERN SHIPPING CO. LTD., MUMBAI

Intern, Finance and Accounting Department May'16 - Jun'16

- Familiarized with Books of Accounts, journal entries, annual reports
- Compared **investment options** on basis of **IRR** and **NPV** values

POSITIONS OF RESPONSIBILITY

INSTITUTE STUDENT MENTORSHIP PROGRAM

Institute Student Mentor Apr'18 - May'19

Received **Certificate of Special Recognition** for commendable efforts

- One of **92 mentors** selected from **290 applicants** after rigorous screening based on **peer reviews** and **all-round performance**
- Aided 12 freshmen in their academic and extracurricular endeavors

SOLID MECHANICS, MECHANICAL ENGG. DEPT

Teaching Assistant, Prof. Jonnalagadda Dec'17 - present

- Conducted weekly tutorials and graded tests for 115 sophomores

IIT BOMBAY SPORTS COUNCIL

Institute Sports Convener Apr'16 - Mar'17

- Executed** inter-hostel championships with footfall of **10K+**
- Contributed to girls' sports mentorship program by motivating participation in **unconventional sports** - cricket, hockey, football

KEY PROJECTS

8 - BAR BOX TRANSPORT MECHANISM

Prof. Anirban Guha, Course Project Jan'19 - Apr'19

- Simulated the **displacement, velocity and acceleration profiles**
- Modelled in **ADAMS Software**; sensitivity & joint clearance analysis

DESIGN AND FABRICATION OF A FOLDABLE HELMET

Prof. Parag Tandaiya, Course Project Aug'18 - Nov'18

- Designed foldable helmet with telescoping **collapsing mechanism**
- Presented 3D printed prototype; modelled on **Autodesk Fusion 360**

HANDWRITING RECOGNITION USING MACHINE LEARNING

Prof. Preethi Jyothi, Course Project Jan'18 - Apr'18

- Compared performance of **CNN, SVM, Capsule Nets** on MNIST
- Computed **confusion matrix** for error identification and accuracy

OTHELLO GAME AI IMPLEMENTATION

Prof. Ganesh Ramakrishnan, Course Project Jan'17 - Apr'17

- Implemented **negamax algorithm** using alpha beta pruning
- Applied vectors and game trees with reduced time complexity

LEADERSHIP & EXCHANGE PROGRAMS

PUBLIC POLICY

Public Policy Bootcamp, Vision India Foundation Jun'19

- Among 150 delegates selected from 750 applicants
- Interacted with MPs, bureaucrats and activists
- Secured second position in **Idea Haat**, for NGO **Bagvati** aimed at rural women empowerment

Young Leaders for Active Citizenship Sep'19 - present

- Developing core skills in policy analysis, advocacy & public leadership as one of **Policy in Action** Fellows
- Co-authoring policy brief on "Disaster Management in Western Ghats" for a Member of Parliament

WORLD BUSINESS DIALOGUE Germany

Attended **keynote speeches** and panel discussions; second position in **Covestro Creation Lab** Feb'19

WOMEN EMERGING IN FINANCE Bangalore

One of 100 selected across IITs and IIMs by **Goldman Sachs** based on interior design business model Jan'18

SEMESTER EXCHANGE, NTU Singapore

Nominated for semester long cultural immersion and education at **Asia's top university** Aug'17 - Dec'17

INDIAN YOUTH DELEGATION South Korea

Represented India in the 10 - day **cultural exchange** and participated in Homestay program May'17

ACADEMIC ACHIEVEMENTS

- Granted branch change from **Civil** to **Mechanical** owing to exceptional academic performance 2016
- Secured **5th rank** overall, **1st rank** among girls in Common Engineering Tests in Maharashtra 2015
- Rank 166** in JEE Mains (out of 1.3 million) 2015
- Bagged All India Rank 1889 in JEE Advanced 2015
- Achieved **rank 1** in Mumbai in HSC Boards 2015
- Recipient of Maharashtra State and eligible for Dhirubhai Ambani Scholarships 2015

CERTIFICATIONS

- Bloomberg Market Concepts • Finance Bootcamp
- KPMG Lean Six Sigma Green Belt • Thomson Reuters

EXTRACURRICULAR ACTIVITIES

SPORTS

- Represented IIT Bombay as a member of basketball team at 51st **Inter-IIT Sports Meet**, Kanpur
- Awarded **Hostel Sports Special Mention**
- Bestowed **Hostel Player** of the Chess GC
- Secured gold in KJ Somaiya's sports fest SKREAM, silver in the ICT basketball tournaments
- Bagged gold in Tug of War and Basketball GCs; silver in Squash and Chess GCs; bronze in Carrom GC

CULTURALS

- Finalist** in BollyNritya group dance competition in Kaleidoscope, cultural fest of Sophia College
- Awarded **Trinity Guildhall** for clearing Speech and Drama Grade 1, 2 and 3 with distinction

COMMUNITY SERVICE

- Volunteered with **NGO Vayam** on collecting data on water resources in Maharashtra Villages as part of Rural Immersion for Science and Engineering, CTARA
- Conceptualized the Dhyanchand Donation Drive for donating old sports equipment in orphanages
- Did **Socially Useful Productive Work**, performed a play on women education in Alibaug villages