

Tanya Gupta

C-204, Vasant Sadhana
Datt Mandir Rd., Mahavir Nagar
Kandivali West, Mumbai-400067
☎ +91 98339 24290
✉ tanyagupta@iitb.ac.in

Link to [Design Portfolio](#)

Education

- 2015-2021 **Indian Institute of Technology, Bombay.**
Dual Degree in [Mechanical Engineering](#), Computer Aided Design and Automation specialization
Minor Degree in [Computer Science](#). Overall CPI - 7.65/10.00
- Autumn 2017 **Nanyang Technological University, Singapore, Semester Exchange.**
- 2013-2015 **Intermediate/+2, PACE Junior Science College, Borivali** Percentage - 96.92.
- 2013 **Matriculation, Vibgyor High School, Goregaon** Percentage - 96.00.

Scholastic Achievements

- **All India Rank 166** in Joint Entrance Examination (Mains) among 1.2 million candidates 2015
- **All India Rank 1889** in Joint Entrance Examination (Advanced) among 150,000 candidates 2015
- Achieved **rank 1 in Mumbai** in Higher Secondary Certificate Board Examinations 2015

Internship Experience

Deutsche Bank (Global Markets Division) [May 2018 - Jul 2018]
Advisory Team, Asia Pacific Desk, Mumbai

- Developed a **Client Solution** tool, supported by excel VBA for opportunity identification, custom analysis and derivative pricing of hedging solutions for all Asian currency pairs vs USD and EUR
- Contributed to a **6 billion USD** deal with a multinational phone manufacturer, did custom **Value at Risk** analysis and **correlation matrix** comparison to assess risks in different currency pairs

Indian School of Business (Center for Analytical Finance) [May 2017 - Jul 2017]
Received Letter of Recommendation from director, Center for Analytical Finance

- Devised algorithms in Python and VBA to implement 5 **trading strategies** on the Indian Equity Markets using existing literature based on F-Score, Accruals, Betting against beta, G-Score
- Successfully found **complexity** of Independent Auditor's reports of **FTSE 800** companies, performed sentiment analysis on analyst call reports and incorporated the results through 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. (Accounts Department) [May 2016 - Jun 2016]

- Reviewed preparation and analysis of **financial statements** and **journal entries**
- Collected data to compare investment options in public sector companies, of basis of **IRR and NPV**

International Exposure and Conferences

HPAIR, Harvard University, Massachusetts, International Relations [Feb 2020]

- One of 300 delegates selected to identify and discuss important economic and social issues facing Asia

World Business Dialogue, Germany, Business Conference [Feb 2019]

- Second position in Covestro Creation Lab, mapped digital customer journey of product designer
- Attended keynotes and panel discussions on digitalization in educational institutions and workspace

Women Emerging in Finance, Bangalore, Goldman Sachs [Jan 2018]

- Selected among 100 women from all over IITs and IIMs for a **two-day interactive workshop**
- Successfully presented a **business plan** of an interior design firm, based on growth of the decor industry

Youth Delegation to South Korea, *Government of India* [May 2017]

- Represented India as part of a **34-member delegation** and participated in a 2 day Homestay Program
- Interacted with Korean youths from various high schools on topics ranging from technology to culture

Academic Projects

Black Scholes Merton Model, *Financial Economics* [Spring 2018]

- Delved into **2008 financial crisis**: subprime mortgage crisis, housing bubble and fraudulent underwriting
- Presented findings to a group of 40 students, modified the model for **currency pair option derivatives**

Handwriting Recognition, *Introduction to Machine Learning* [Autumn 2017]

- Compared prediction accuracy of **logistic regression, perceptrons** and CNNs on MNIST database
- Computed **confusion matrix** for error identification and verifying accuracy

Othello Game AI Implementation, *Data Structures and Algorithms* [Spring 2017]

- Used vectors and game trees with **reduced time complexity** to play Othello against computer
- Implemented **negamax algorithm** using **alpha beta pruning** to design the AI and employed graphics

Positions of Responsibility

Institute Student Mentor, *Institute Student Mentorship Program* [Apr 2018 - May 2019]

- One of **92** selected from **290 applicants** based on interview, peer reviews and all-round performance
- Responsible for guiding **12 freshmen students** in their academic and extracurricular endeavors.

Teaching Assistant, *Solid Mechanics* [Jul 2019 - Nov 2019]

- One of 2 Undergraduate students assigned as TAs for the sophomore course
- Responsible for grading tests, conducting tutorials and clearing concepts for a class of 115 students

Extra-Curricular Activities

Policy in Action Fellow, *Young Leaders for Active Citizenship* [Sep 2019 - Oct 2019]

- Developed advocacy & public leadership skills; part of 60-member cohort from 300+ applicants
- Conducted live research project on "Ecological Conservation in the Western Ghats" for Mr Binoy Viswam, Member of Parliament along with 4 team members from diverse backgrounds.

Public Policy Bootcamp, *Vision India Foundation* [Jun 2019]

- Among the 150 delegates selected to interact with MPs, bureaucrats and activists
- Second position in competition for NGO focusing on women empowerment and sustainable fashion

Community Service, *Rural Immersion program for Science and Engineering students* [May 2019]

- Devoted two weeks in 4 different villages of Maharashtra understanding rural lifestyle and problems
- Worked with NGO **Vayam** to analyse data on infrastructure and availability of water resources

- Represented IIT Bombay as member of **Institute Basketball team** at Inter-IIT Sports Meet, Kanpur

- Awarded **Hostel Sports Special Mention** for contribution to winning Squash, Chess, Carrom GCs

- Awarded **Trinity Guildhall** for clearing Speech and Drama Grade 1, 2 and 3 with distinction

- Conceptualized the **DhyanChand Donation Drive** for donating old sports equipment in orphanages

Key Courses

Computer Science Computer Programming, Data Structures and Algorithms, Computer Networks, Design and Analysis of Algorithms, Machine Learning, Principles of Data and System Security

Applied Math High Performance Scientific Computing, Introduction to Numerical Analysis, Stochastic Processes, Computational Fluid Dynamics, Computer Aided Simulation of Machines

Certifications Bloomberg Market Concepts, IIT Bombay Finance Bootcamp, KPMG Lean Six Sigma Green Belt, Thomson Reuters Eikon 4, Certified Marketing Analytics Practitioner