



Chitrangna Bhatt
Energy Science and Engineering
Indian Institute of Technology, Bombay

16D170015
Dual Degree (B.Tech. + M.Tech.)
Gender: Female
DOB: 22-08-1997

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2021	

Pursuing **Minor in Management** and **Honors in Energy Science** | Currently Department Rank 5 out of 27 students

PROFESSIONAL EXPERIENCE

- VIACOM18 MEDIA PRIVATE LIMITED** (May'19 - Jul'19)
Rated "Exceeds Expectations" (highest of 4 ratings) by Senior Manager; Data-Science Intern
Recommendation Engine: Implemented for the 1st time in Viacom
- Developed the **association model** after data preparation of **22B+** records on **PySpark** and **Apache Hadoop**
 - Analysed viewing behaviours of **12M+** users in **1.5k+** shows through **Apriori algorithm** on **IPython Kernel**
 - Built a fully automated, **user-customised recommendation engine**, further used to improve marketing strategies
 - Star Series Acquisition:* Deduced favorable acquisition through comparative analysis based on **5** shortlisted KPIs
 - Ensured **retention** of at least **7.4% new users** and **3.5%** linearly-increasing-market contribution in **Kannada SBU**
 - Scrutinized feasibility of **expansion** in two different markets by analysing fanbase distribution and their demographics
- CARNOT TECHNOLOGIES PRIVATE LIMITED** (May'18 - Jul'18)
Received Open Internship Offer from the Co-Founder and CTO; worked on 2 priority projects, Firmware Intern
- Accelerated **quality check** by **900%** on **Smart-Car** device - **single-handedly** developed a CAN-based parallel check
 - Designed tractor-emulator model to mimic **Mahindra Tractors**, saved travel time in tractor device quality check
 - Enabled remote testing of business management tool helping **~3.5M** rental tractor **farmers** earn upto **30%** more

INTERNATIONAL EXPOSURE

- ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE**, Switzerland (Sep'19 - Jan'20)
- Heyning Roelli Scholar** - selected from worldwide applicants and awarded with a monetary prize of **CHF5000**
 - Gained basic proficiency in French during **semester exchange**, journeyed to **5+** countries and explored their cultures
- GRUVATIEZ** — First OPL(eco-district) in Switzerland | EPFL (Sep'19 - Nov'19)
Course project in collaboration with Orllati Real Estate and Induni enterprises, with students from Sweden, Norway
- Conducted quantitative assessment of pre-fabricated vs on-site product, for eco-district of **226** flats over **27000m²**
 - Forecasted **~90% reduction** in energy demand, material, greenhouse potential; presented the analysis and insights
- ROAD SEGMENTATION USING MACHINE LEARNING** | EPFL (Sep'19 - Nov'19)
Road extraction from satellite images, competition on Aicrowd platform (course project)
- Applied polynomial and ridge regression, followed by basic neural network, in collaboration with students from France
 - Achieved an accuracy of **75%** on test data by applying feature selection and parameter optimisation for improvement

KEY COURSE PROJECTS & THESIS

- INDIA'S ELECTRIC VEHICLE POLICY ANALYSIS** (Jan'19 - Apr'19)
- Reviewed **Govt.'s FAME policy** on charging infrastructure, identified stakeholders & compared with China's policy
 - Compared the present penetration, grid capacity, charger stock, land availability with expected; examined sales data
 - Implemented **Fischer-Pry Model** to predict a **62.3%** required **growth rate** and **proposed** a lease charging model
- MATHEMATICAL MODELLING OF LI ION BATTERIES** | Master's Thesis (Jul'20 - Present)
- Goal : Generating insights into **potential impact** of electrode microstructure on battery performance via simulations
 - Presented an **analysis** of electrode models, numerical solving methods; **gave insights** for energy, power density boost
- AMUL PRODUCT MARKETING** (Aug'18 - Nov'18)
- Conceptualised a new product and conducted required **market research** - expected revenue, demand and competitors
 - Presented product's segmentation, targeting and positioning along with **2 contingency plans** for unforeseen events

LEADERSHIP ROLES

- ELECTRICAL SUBSYSTEM LEADER** | Student Satellite Team (Feb'18 - May'18)
Spearheaded 10 membered team of 2 subdivisions, conducted a three stage recruitment procedure for ~100+ applicants
- Collaborated** in a team of **50+** to ensure implementation of Quality Assurance practises, **mentored 6** new recruits
 - Performed **feasibility analysis** for **2** payloads, generated subsystem level requirements following guidelines by **ISRO**
 - Solely composed** Battery wiki for Satellite101 website for student satellites(currently **1Lakh+** views and **38k+** users)
- INSTITUTE INTERNSHIP COORDINATOR** | Placement Cell (Apr'18 - Apr'19)
Streamlined the internship recruitment procedure for 2000+ students and 400+ recruiters, in a team of 34 students
- Achieved a **200% increase** in the department internships through targeted contacting in the first phase of recruitment
 - Ideated and framed **INR 10M+** Alumni Scholarship model to benefit **30+ students** for International Research
 - Scheduled organisation of GD/PI and PPTs; coordinated on-ground management during placements and internships

CERTIFICATIONS & EXTRA-CURRICULARS

Scholastic	• Certified as one of India's Brightest Engineers(1 in 104) by Economic Times , of 49k+ participants('20)
	• Teaching Assistant: Data Analysis & Interpretation(R); did CS101 Programming (C++) ('20,'17)
	• Selected for the Talent Development and Leadership Program MANCH, by Deutsche Bank ('18)
	• Certified Business Analytics Practitioner via workshops by Henry Harvin Analytics Academy ('19)
	• Co-authored paper on "Possibility of Solar Helioseismology using Cubesats", selected in NSSS ('19)
Public	• Presented Pratham satellite(team of 2) in Inter-IIT Tech Meet , KJ Somaiya College's TechFest ('18)
Outreach	• Strengthened relations in Purdue University's International Festival; 25% increase in internships ('19)
MOOCs	• Data Analytics and Python (IBM) and Financial Market Analysis (International Monetary Fund) ('18,'20)

Scholastic achievements and extracurricular activities are not verified by the Placement Cell