



Dhanya Bahadur
Chemistry
Indian Institute of Technology Bombay
Specialization: Chemistry

17B030027
UG Third Year (B.Tech.)
Male
DOB: 26/01/2000

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2020	6.80
Intermediate/+2	Chinmaya Vidyalaya Bokaro	CBSE	2017	92.80
Matriculation	Sainik School Purulia	CBSE	2015	10.00

Scholastic Achievements

- Pursuing minor degree in **Electrical Engineering** from our institute [2018]
- Secured **92.8** percentage in **Higher Secondary Examination** of Class 12 **CBSE** Board [2016]
- Recipient of the prestigious **National Talent Search Examination (NTSE)** Scholarship [2013]
- One among **TOP 79** students in country who were awarded **Dr B R Ambedkar Medha Puraskar** [2015]

Internship

Web Developer | Front End Web Developer | BETR Consulting [Dec'18]
Team Responsible for developing front end of our company's website

- Successfully Developed **Front End** of the **Company's website** using **Angular Framework(Angular 6)**
- Temporarily **Integrated** the **Front End and Back End** of the website using **Heroku**
- Worked on other Projects of company including **Online Coaching Classes**
- Interacted with students to understand and develop the website for **Online Coaching** effectively
- Improvised **Business Development Plan** by studying Business Development Strategies of other companies

Technical Projects

Self Driving Cars | Research Project [May'19-Present]
Guiding Professor: Arpita Sinha, Department of System and Controls, IIT Bombay

- Currently working on improvising the **Efficiency and Accuracy** of movements of **Self Driving Cars**
- Currently working on **Torcs Simulator** and **Snakeoil Controller** to analyse different **Deep Learning** Models
- Prepared and improvised the model of Car using **Reinforcement Learning(particularly Q-Learning)**
- Researched on Self Driving Cars by reading various research papers and implementing them in my model

Rakshak | System and Controls Engineer [Dec'17-Present]
Guiding Professor- Krishnendu Halder

- A key member of team working on **UAVs** and **UGVs**
- Worked on flight controller **Pixhawk** connected with transmitter,GPS and other components
- Configured with **Mission Planner** or **QGround Control** , a full featured ground station application
- Worked on calibrating the values , setting base parameters and uploading the way points to **QGround Control**

Relish Trip | Entrepreneurship Course Project | Entrepreneurship [Mar'18-Apr'18]
Guiding Professor: Raj Jaswa, SINE, IIT Bombay

- Analyzed the field of **Search Engine Optimization(SEO)** to optimize the official webpage
- Improved the website's ability to drive business goals and customer demands
- We reached out to potential customers to understand their needs and expectations from our startup
- Helped in improving the **Business Model Canvas(BMC)** by customer segmenting, building a better **Value Proposition**
- Analyzed the entire startup and came up with **effective solutions** for customer channels

All Terrain Service Vehicle(ATSV) | Institute Technical Summer Project [May'18-July'18]

- Worked in team of four to develop a Semi Autonomous Hovercraft
- Used micro-controllers like **Arduino**, **MPU6050**, **Ultrasonic Sensors** etc to control bot
- Analysed Hovercraft's model using **ANSYS** various simulation

- Achieved **Wireless connectivity** using microcontrollers and Blynk App

Positions of Responsibility

Institute Sports Convener | Rubik's Cube Club | Sports Council, IIT Bombay [Apr'18-Apr'19]
A Team working on Developing and Promoting the Environment of Rubik's Cube

- One among **Top 34** out of **120** students who were selected as **Convener of Sports Council of Institute**
- Organised **IIT Bombay HALF MARATHON** in collaboration with **HA Council** and **FITIZEN**
- The event witnessed a Footfall of **over 4000** people
- **Ideated** and **Successfully** organised **Freshie-La-Vista** , a sports event for 850+ students
- Successfully Organised **Freshmen Orientation** , a sports event for 800+ students

Abhaysarika Volunteer | Non Government Organisation [Apr'18-Present]
An NGO responsible for preparing Poor students for Competitive Exams, IIT Bombay

- **ABHAYSARIKA** is a **Non-Profitable Organisation** constituting Volunteers as students of IIT Bombay
- Volunteer in Teaching economically weaker students of Classes 11 and 12
- **Mentoring** Development of students and preparing them for **Competitive Exams** and Board Exams

Events Coordinator | Informals | Mood Indigo, IIT Bombay [July'18-Jan'19]
Part of a team of 4 members dedicated towards Organising and Conducting Events

- Incentivised participation for **Flagship Competition** by facilitation of **International Opportunities** for Winners
- **Conceptualized** customised integrations to facilitate **Interactive BTL Activations** for various sponsors
- **Enhanced experience** of **100,000+ visitors and Judges** by assembling lounges strategically placed in 550+ acres
- **Spearheaded Negotiations** with Artists and Vendors to curate unique events in the Festival

Technical Proficiencies

- **Software Packages:** **MATLAB**, AutoCAD, **ANSYS**, LTSpice, **TORCS**, Solidworks, **RStudio**, **Jupyter** notebook , Arduino , Raspberry Pi
- **Programming Languages:** C++, LaTeX, **Python**, Arduino

Key Courses Undertaken

Core Courses	Calculus, Data Analysis for Chemists, Thermodynamics, Linear Algebra, Quantum Physics and Applications, Electricity and Magnetism, Differential Equations , Analog Circuits, Probability and Random Processes
Computer Science	Machine Learning ,(Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning), Data Structures and Algorithms , Machine Learning for Data Analysis

Extracurriculars

- Sucessfully completed **21Km** run in IIT Bombay Half Marathon
- Secured **5th** position in **Boy's Cross-country Championship** held on 2nd Sem of the academic year 2018-19
- Secured **6th** position in **Crosscountry Championship** of Sophomore students of IIT Bombay
- Won silver medal in **BIATHLON** (5Km running+7Km Cycling) held on 26th january 2018
- Volunteered and assisted the Hostel council in crowd management during admission of MTech and Phd students which had witnessed footfall of 5000+ students
- Won gold medal in **Volleyball** championship of RAFTAAR-18 (competition between H 16 and H 15)
- One among TOP 6 players who represented NSO Team of IIT Bombay in **Aavhan Volleyball Championship**
- Selected in National Sports Organisation , Volleyball