Abhijit Garg   16D260005

Engineering Physics   B.Tech.

Indian Institute of Technology, Bombay   Gender: Male

                                                    DOB: 15-08-1998

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

SCHOLASTIC ACHIEVEMENTS

- Recipient of the prestigious **KVPY** (Kishore Vaigyanik Protsahan Yojana) fellowship with an **All India Rank 612** ['14]
- Bagged **3rd** runner up position in **National Finals** of iKen Scientifica sponsored by **National Geographic Channel** ['12-'13]
- Ranked **36th internationally** in the 16th NSO conducted by SOF which saw participation from **14 countries** in Asia ['13]
- Secured **AIR 83** in physics and an overall **AIR 245** in NSTSE (National Level Science Talent Search Examination) ['13]
- Procured **AIR 129** in Technothlon (International School Championship) organized by Techniche 2014, **IIT Guwahati** ['14]
- Awarded certificate of merit for being in **top 1%** (state wise) in NSEP (National Standard Examination in Physics) ['15-'16]

WORK EXPERIENCE

GrIn | Entrepreneurship Project | DSCE, IIT Bombay   [Jul '18 - Mar '19]

*(**Co-founded** 'GrIn' to solve the problem of too hot & too cold water in summers & winters; **TAM: 4.9 million** households)*

RECOGNITION	**Semifinalist** in **Asia's largest** business model competition **EUREKA!** conducted by E-Cell at IIT Bombay **Pre-incubated** by IDEAS, which offered a grant of **INR 50,000** to develop a reliable product-market fit
OPERATION	- Conducted **70+ direct interviews** progressively to find the **'Aha!' moments** and validate hypotheses **Campaigned on social media** using illustrative **video** to boost awareness and gather data for analysis - Facilitated validation from **300+ people** to identify exact **customer segment** for our business model - Negotiated with **20+ OEMs** for **partnership** to enhance their USP and build our **first customer base** - Tested the components for our **sanctioned prototype** of digital thermostatic mixer for real conditions
RESULT	- Pulled off **400% cost reduction** by revamping our Business Model Canvas through continuous feedback **Commended** by the **chief guests** in the final round for exceptional work and a fabulous presentation

POSITIONS OF RESPONSIBILITY

Department Placement Coordinator | Institute Placement Team | IIT Bombay   [Jul '20 - Present]

*(Assisting placement of **1600+** students; interface between placement cell, students and company officials)*

INITIATIVES	**Collaborated** with other departments to help students prepare better for core engineering profiles - Conducted a **mock verification round** for doubt-free and credible documentation of resume points
DUTIES	- Organized **preparatory activities** namely: coding & aptitude tests, GD & PI sessions and case interviews - Compiled student expertise and interests to **streamline company pitching** for maximum recruitment

KEY PROJECTS

Biophysics | Membrane Curvature | SLP, IIT Bombay   [May '18 - Nov '18]

(Guide: Prof. Anirban Sain, Department of Physics, IIT Bombay)

- Studied the elastic properties of lipid bilayers and the effects of protein binding on them along with the fundamentals of **differential geometry** to understand the Helfrich contribution of **shape deformation** in the total energy of a membrane
- Analyzed the spontaneous formation of narrow tubes due to arrangement of spiral-shaped protein filaments (**nematic field**) on the surface of a membrane to appreciate the Frank contribution of **orientation distortion** in the total energy
- Used the Helfrich and Frank contributions and their coupling effect to **derive a quantitative expression** for the total energy

Microprocessors | Robotic Memory Arm | Course Project (EP 315), IIT Bombay   [Aug '18 - Nov '18]

(Guide: Prof. Pradeep Sarin, Department of Physics, IIT Bombay)

- **Built** a robotic arm to carry any object from one spot to another using servo motors, **Arduino** board and potentiometer
- Enhanced the robot with simple turn dials for **intuitive input** and **on-site** positioning of the arms for greater utility

Software | Transport Management System | AISSCE, Maheshwari Public School   ['15 - '16]

(Guide: Mr. Daya Shankar Sharma, PGT (Computer Science), MPS)

- Built an interface to fetch & modify information of employees using **GUI** forms in **NetBeans IDE (Java)** platform as **front-end**
- Organized the collected data in tables and returned fetch requests through queries using **MySQL** software as **back-end**

SKILLS AND EXTRA-CURRICULARS

COURSES	**Pottery** by IDC in Spring '19	**Mandarin** by IR in Autumn '19
TECHNICAL	- Made **20+ working models** like **two-legged robot** and Rube-Goldberg machine during iKen workshops - Built a wireless car for **XLR8** competition	Built a **model rocket** for Aquarock competition
MENTORSHIP	Mentor in Summer of Science-2018 organized by Maths and Physics Club, IIT Bombay	
SKILLS	**Software:** Origin, NetBeans, MySQL, AutoCAD	**Programming:** Python, C++, Java, HTML

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