



DEVANSH DHRAFANI

Course : **M.Sc. (Hons.)**, Physics and **B.E. (Hons.)**, Mechanical Engineering, 2022

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CGPA : 7.95



Subjects / Electives	Mechanics of Solids, Machine Design and Drawing, Kinematics and Dynamics of Machines, Production Techniques, Material Science, Applied Thermodynamics, Fluid Mechanics
Technical Proficiency	Computer-Aided Design (CAD), 3D printer and applications, SolidWorks, Mechatronics, ANSYS, Python

SUMMER INTERNSHIP / WORK EXPERIENCE	
Summer Intern, Adani Power	May 2019 - Jul 2019
<ul style="list-style-type: none">Developed ALFA - An open-source floor-assistant robot, that can be controlled over the internet.Designed CAD Model and fabricated the robot (Motor Mounts, Support rods and other mounts were 3D Printed)Assembled electronics Github Link	

PROJECTS	
Finding Coefficient of Drag of model airplane using Accelerometer Drop Test - Mechanical	Jan 2020 - Apr 2020
Research project under Dr. Meenakshi V and Dr Aravind Raghavan of Physics Department, BITS Pilani, Hyderabad Campus. Coefficient of Drag is an important parameter for aircraft design. We developed a cost-effective, easy to setup method to calculate Coefficient of Drag of a model airplane. The airplane embedded with an accelerometer was dropped from a fixed height and acceleration data was analyzed to find the Coefficient of Drag. MPU 6050 and Arduino Pro Mini with a microSD card was used to log the data.	
Fabrication of Microfluidic Electrochemical Sensors using 3D ink extrusion PCB printer - Mechanical	Aug 2019 - Dec 2019
As a 5-month Lab Oriented research project, worked at MEMS Lab, BITS Pilani, Hyderabad Campus under the supervision of Dr. Satish K Dubey and Mr J Murli Mohan. Developed a novel method for the fabrication of PoC Electrochemical sensors. The project explored the use of a 3D ink extrusion PCB printer to print conductive carbon ink on a glass substrate to create a low cost, portable electrochemical sensor for the detection of various analytes.	

POSITION OF RESPONSIBILITY	
Technical Head - Spectrum Physics Association	Aug 2019 - May 2020
<ul style="list-style-type: none">Lead Editor and Designer of Spectrum Physics Association's blog- Prism.Managed Spectrum's graphic design team: Worked closely with designers to create promotional material for Club events and blog posts.Explored additional sources of revenue and ended up increasing club profits by Rs 25,000 from the previous year.Organized events like Time vs Physics, Paper Presentation during ATMOS 2019 (Technical Fest of BITS Pilani Hyderabad Campus) which had a participation of over 100 teams.	

COMPETITIONS	
TBI BITS Hyderabad's - B-Plan Competition	Nov, 2018
<ul style="list-style-type: none">Secured 1st place in Technology Business Incubator(TBI), BITS Pilani-Hyderabad Campus's Business Plan Competition 2018.Won Rs 50,000 seed funding for our startup idea: WOGI - Flexible Cabins for Open Office Spaces. Link	

VOLUNTEER EXPERIENCE	
National Service Scheme (NSS) - Role: Volunteer Cause: Education	Aug 2018 - May 2019
<ul style="list-style-type: none">Volunteered for Computer Literacy Program (CLP): Teaching basic computer usage to underprivileged students from village Thumkunta.Volunteered for Village Adoption Program: Teaching scientific theories using experiments to underprivileged students of grade 6-10 from village Anthiapally.	