## Ritobrita

De



27 June 1997



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### Education ——

BTech (Biomedical Engineering) | 2020 | GPA:8.6/10

Class XII

Bhavan S G B Kanoria Vidya Mandir | 2015 | 88 %

Class X

Bhavan S G B Kanoria Vidya Mandir | 2013 | 10/10

# Skills ———

Languages: Java, Python, C, C++, MATLAB, SQL, Visual Basic, R, ROS

WebDev: HTML, CSS, JS, JQuery,

ReactJS, VB Script

Simulation: Arduino, Keil micro Vision

Design: Autodesk, Eagle, Multisim

### Extra-Curricular —

Public Speaking: Toastmaster International Certified Competent Communicator and Competent Leader

NGO: Helphen India Project Kinder

## Languages ———

English, Hindi, Bengali, German

## M00Cs ———

Numerical Methods with Python Object Oriented Programming w/ Java Data Structures and Algorithms: Algorithmic Toolbox Neural Networks and Deep Learning

#### Relevant Experience

Current

Research Intern

Center of Artificial Intelligence and Robotics, DRDO

Embedded C programming of different gait patterns for a Quadruped
Robotic Mule. Computer Vision project on fusion of lidar and camera
point cloud data for generation of cost map for navigation using ROS.

May-Jul'19 Summer Intern SimYog Technology, IISC, Bangalore

Developed web-app of an electrical schematic editor.

May-Jul'18 Summer Intern ABB Ability and Innovation Center, Bangalore Worked on automated testing of GUI and created a platform to execute batch files remotely in VMs.

Electronics Engineer Team RoverX, Creation Labs, VIT
Designed and produced the electrical and safety systems of a prototype Mars Rover and participated in University Rover Challenge.

#### Research and Projects

Nov-Dec'18 MEMS piezoresistive sensor

Novel design with higher sensitivity and imporved linearity. (Under review in Thomas Reuter indexed journal.

Oct-Nov'18 Amoe-Bot

2017-'18

A robotic hand gripper bio-inspired from an Amoeba that can lift dissimilar objects and identify the shape based on pressure cues.

Jul-Dec'18 Mixed Reality Lab

At VIT, we developed Mixed Reality guided hardware electrical labs to facilitate learning for the future students using Microsoft Hololens.

Aug-Oct'17 Object detecting autonomous rescue quad-copter

An autonomous drone to investigate and manoeuvre nebulous surroundings made under the mentor-ship from IISC, Bangalore.

Aug-Nov'17 Posture Diagnostic Rehabilitative device

IR sensor enabled device to detect and measure the extent of cervical, thoracic and lumbar spinal deformities.

Sept-Nov'16 Sleep Inducer

Induces and monitors deep sleep in subject using delta wave resonance.

#### Achievements

2019-'17 Toastmasters International

International Speech Contest(2019): Won club level and participated in area level contest. Humorous Speech Contest(2017): Won 3rd prize in club level contest.

May'18 University Rover Challenge

Qualified amongst top 20 teams worldwide.

Jan'18 Coordinator - Indian Rover Challenge

Started The Indian Rover Challenge, the only Asia-Pacific robotics space exploration competition of its kind in collaboration with the Rover challenge series of The Mars Society of USA.

Sept'17 Winner - Dover Think-OFest

Augmented Reality enabled servicing and assembling of products.

Mar'17 VIT - Purdue Partnership Hackathon

Show cased projects under Creation Labs, VIT and initiated collabo-

rative projects.

2016-17 Merit Scholarship

Scholarship for top performance in academics, VIT.

2010 National Science Olympiad Gold Medal (School Level)