BHAVYA SHARMA

MASTERS IN PHYSICS,
BITS GOA

CONTACT INFORMATION

Email : bhavyas2603@gmail.com
Mobile: (91) 89494-85816
https://github.com/bs2603

WORK EXPERIENCE

AERODYNAMICS CLUB BITS GOA
CORE MEMBER (09/2017 - 05/2019)

- Worked on build and fly of various RC airplane designs
- worked on build and fly of a quadcopter
- currently working on build of an RC air-cushion vehicle (ACV)
- Worked on aerofoil design and simulation on XFLR5

SANDBOX MAKERSPACE BITS GOA
PUBLICITY COORDINATOR (08/2018 - PRESENT)

- I overlook the publicity of the lab among coorporations, other colleges and organizations.

ELECTRONICS AND ROBOTICS CLUB BITS GOA
CREW MEMBER (08/2017 - 08/2018)

- Built Locomotion and sensor robots using Arduino IDE and Processing V3.

COURSES AND CERTIFICATIONS

- **Workshop on Computer Management and security organized by Nettech**
  (10/2017)
  In this workshop we learnt about network management, basics of UNIX and networks ; FTP, DNS ,DHCP ,Samba and Proxy.Server configuration, Hacking and its Counter measures and cyber crime.
  Online courses-
- **(Coursera) -Building Arduino Robots and Devices**
  (by Moscow university of Physics and technology)
  In this course I learnt basics of electronics, Arduino programming and made a 180 degree surrounding mapping system.
- **(Coursera)- Course on Aerial Robotics by Penn State University under Professor Vijay Kumar**
- **(Coursera) Operating Systems**

RELEVANT COURSES

- Linear Algebra
- Probability and Statistics
- Non Linear Dynamics
- Complex Algebra
- Theoretical Neuroscience
- Classical Mechanics
- Electromagnetic Theory 1 and 2

SKILLS

- Solidworks -Fusion 360 -C Programming -C++ -Arduino Programming -Python 3 -Adobe lightroom -Adobe premere pro -Gazebo -ROS -Processing v3 -MATLAB

EDUCATION

- BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE,K.K. BIRLA GOA CAMPUS (08/17-Present)
-G.S. Jangid Memorial School, Jodhpur, Rajasthan
High School August 2015 — May 2017
-Delhi Public School, Jodhpur, Rajasthan (08/01-05/15)

PROJECTS

BOEING AERODELLING COMPETITION TECHFEST IITB
(TEAM LEAD) (12/2017)

- We simulated various aerofoil and RC plane designs and created a prototype RC plane in compliance with the problem statement of the competition.

SPIDERBOT
(08/2018 - PRESENT)

- A Quadruped robot in the form of a spider which can locomote and analyse its surroundings using various sensors.

AIR-CUSHION VEHICLE (ACV) DESIGN
(08/2018 - 01/2019)

- Worked on build and design of an RC ACV prototype with a higher payload capacity and lower noise generation.

HOLTER MONITOR
(01/2019 - 05/2019)

- Making a heart rate monitor that is much more cost efficient than industrially sold heart rate monitors.

HUMAN MACHINE TEAMING
(01/2019 - 05/2019)

- Teaming swarm quadcopters with humans to provide efficient functioning, this project was in collaboration with DRDO.

SMART VISION ANALYSIS
(01/2019 - 05/2019)

- Improvision of Image detection algorithms by their comparision with how the human brain analysis pictures

MOTION PLANNING OF A VEHICLE
(01/2019 - 05/2019)

- wrote Python 3 code to simulate the motion of a F1 racecar on a complicated racetrack.

SHELL DEVELOPMENT
(05/2019-PRESENT)

- Made a Bash shell using C++