

Vaibhav Agarwal

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Graduation

2015 | 2019 **B. Tech in Production and Industrial Engineering**, *Indian Institute of Technology, Roorkee, Uttarakhand.*

Internships

May 2018 – **Product Designer**, *Industrial Design Centre (IDC)*, IIT Bombay.

- July 2018
 - Performed calculations for reflector dimensions and angle for an effective gain of solar radiation
 - Prepared and tested Solar oven reflector mockups using the different materials and techniques for visualization
 - Used mind map for product brainstorming and ideation

May 2017 – **Summer Intern**, *Honda Cars India Limited*, NOIDA, Uttar Pradesh.

- July 2017
 - Performed quality testing of car parts via various equipment and processes like the salt spray test, spectrometric analysis, coating thickness gauge, contracer & profile projector
 - Successfully automated the calibration schedule
 - Gained hands-on experience and expertise on the quality testing of various car components using state of the art metrological and metallurgical equipment

Dec-2017 – **Product Design & Development**, *Fermedicius Labs*, IISC, Bangalore.

- Jan-2018
 - Designed and built components for Automatic Beverage Dispenser (Consumer Automation Bot)
 - Developed and performed experiments using 3D printed prototypes of various components
 - Designed Auger Screw for Feed Screw mechanism and researched different dispatching and delivery mechanism of beverage ingredients in different phases like liquids, solids and powders

Dec-2017 – **Product Design**, *Be Cre8v*, Faridabad.

- Jan-2018
 - Designed MDF components and assemblies in SolidWorks, used rendering for the cover of kit
 - Prepared detail drawings for manufacturing of Robot Kits
 - Used Laser Cutting Operation for cutting MDF sheets

Skills

CAD Solidworks, Ansys, AutoCAD, SolidWorks Visualize, KeyShot
Software

Programming Arduino

Graphics Adobe Illustrator
Design

Projects

Development of a modular accessory for mobility enhancement of manual wheelchairs, .

Working on development of affordable and easy to install the device for automation of manual wheelchair. This project aims to target the users with the weak financial support as the existing products are very expensive.

Bicycle based Agricultural Equipment, .

Developed CAD design and the working model of an affordable and ergonomic agriculture equipment for crop cutting

Restaurant of the Future, .

Design and developed Waiter Robot which is able to navigate through the restaurant and serve dishes.

Humanoid Robot, .

Developed a Humanoid Robot in Models and Robotics Section (MARS) capable of walking with various movements. It can also be controlled by visual commands through body action by using Xbox Kinect sensor

Design of Automobile Connecting Rod for Axial Load, .

Performed Evaluation & Analysis on various modalities of Connecting Rod using Software including Solidworks

"Non Use Value" determination of Natural Resources such as river Ganga, .

Working on the evaluation of "Non-market use" & "Non-use values" for Ganga River using different statistical models under Department of Management Studies

Awards

Runner-up at TechnoCad, Cognizance 2018 (CAD Designing Competition), *March 2018.*

Cognizance, IIT Roorkee

Awarded with the "Dedicated Proficiency Holder" certificate for my contributions to NSS throughout the year 2015-16., *March 2016.*

NSS, IIT Roorkee

Winner at Inter Bhawan Chess Championship 2015-16, *Feb-2016.*

Students Club, IIT Roorkee

Ranked 3rd Position in Intra Bhawan Chess Championship 2015, *June 2015.*

Rajendra Bhawan, IIT Roorkee

Runner-up in Inter Bhawan tech trophy Speed Cubing 5x5 2017, Feb-2017.

Tech Trophy, IIT Roorkee

Runner-up in MechOlympia Carrom Tournament, MIED Sports event 2018, March- 2018.

MIED, IIT Roorkee