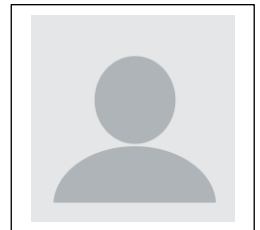


# Your full name

[your email id](#) | +91-phone no | LinkedIn: [Linkedin url/](#)

Address in short



## EDUCATION

### Manipal Institute of Technology

*BACHELOR OF TECHNOLOGY in Mechanical Engineering; CGPA: 9.12/10.0*

Manipal, IN  
Expected MAY 2020

**Minor Specialization:** Design

**Relevant Coursework:** Engineering Mathematics, Physics, Biology, Management, Fluid mechanics, Thermodynamics, Heat Transfer, Automobile Engineering, Mechanical Design, DFMA, Fatigue and Fracture, Finite Element Methods, Vibrations, Data Science.

### Vijaya Ratna Junior College

*INTERMEDIATE EDUCATION, Telangana State Board, Grade A, Marks: 974/1000*

Hyderabad, IN  
JUL 2014 – JUN 2016

### Millennium Talent High School

*SSC, Telangana State Board, GPA: 9.5/10.0*

Madhira, IN  
MAR 2014

## PERSONAL STATEMENT

Aspiring to work in the field of Mechanical Engineering to gain experience and to build a technical career while contributing to the growth of the organization.

**Areas of Interests:** Design & Analysis of Mechanical Systems, Robotics and Control Systems, Biomechanical Systems.

## WORK EXPERIENCE

### Mars Rover Manipal ✂

*Research Lead*

Manipal, IN

*Mechanical Subsystem member – Robotic Arm*

JUN 2018 – MAY 2019

DEC 2016 – MAY 2018

- Lead a team of 6 undergraduates, working on projects like Autonomous bicycle, 7DOF Robotic arm, underactuated grippers.
- Developed a 6DOF robotic arm which has abilities of equipment servicing and object manipulation with precision and power grasp.

**IRC 2017:** Indian Rover Challenge, First ever rover robotics competition in Asia.

- Won 1<sup>st</sup> place all over the world in the inaugural IRC.

**URC 2018:** University Rover Challenge, an international premier robotics competition organized by Mars Society, USA.

- Developed a Mars Rover prototype and competed at URC 2018 at Mars Desert Research Station, Utah, USA.
- Won 7<sup>th</sup> all over the world, 2<sup>nd</sup> in Asia.

**IRC 2018:** Indian Rover Challenge 2018

- Organized an International robotics competition with the help of Mars Society USA in Manipal, India.

### Mahindra Powerol

*R&D Intern*

Pune, IN

MAY 2018 – JUN 2018

- **Genset Optimization:** Performed various tests like noise levels, Fuel Consumption, Power quality, Temperature, Efficiency and presented methods to optimize gensets with power ratings of 320, 125, 5 KVA.
- **Engine Exhaust design optimization:** Developed a program in Matlab to get specifications of parameters like exhaust pipe diameter, height of mountings etc, depending on parameters like engine back pressure, temperature etc.

### Perma-Liner Industries LLC.

*R&D Manager Intern*

Manipal, IN

MAY 2019 – AUG 2019

- **Crawler bot:** Founded and leading a team to design and assist the R&D team of Perma Liner in designing a crawler bot that has abilities of Pipe mapping, navigating, cleaning etc.

### Musculoskeletal Biomechanics Research Lab, McGill University ✂

*Research Assistant*

Montreal, CA

MAY 2019 – AUG 2019

- **Robotic Spinal Cord:** Implementation of control algorithm on an analogous Spinal Cord equipped with McKibben air muscles. Integration of position and force sensors, microfluidic valves for pressure control in the muscles with a PID controller in LabVIEW.

### Mars Society South Asia ✂

*Founding Director*

IN

MAY 2019 – Present

- MSSA is a registered non-profit entity based out of India which oversees the space advocacy activities of all the 8 South Asian countries. It is focused towards spreading knowledge about Mars Missions, Space explorations, conducting manned research missions to Mars Desert Research Station in Utah, Organizing Indian Rover Challenge and many other activities.

### Eleation CAE

*Intern, Nominated as CAE Trainer*

Manipal, IN

MAY 2019 – JUN 2019

- Worked on various real-life analysis problems like automobile engine components, Roll Cage, Suspension etc. using Ansys Workbench.
- Nominated as an employee in the position of CAE Trainer at the end of the internship.

## TECHNICAL BRIEFS

- "Design and analysis of underactuated gripper using Chebyshev lambda mechanism with slip preventive strategy for fragile objects", presented in Second International Conference on Advancements in Automation, Robotics and Sensing – ICAARS 2018, Manipal Research Colloquium- MRC 2018.
- "Development of Control System of a Robotic Spine benchtop model", in process.

## SKILLS

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- **Languages:** C++, Python
- **Operating Systems:** Windows, Linux
- **Design tools:** Catia, Solidworks, AutoCAD, Fusion 360
- **Analysis tools:** Ansys Mechanical APDL & Workbench, Adams
- **Programming tools:** Matlab, LabView

## AWARDS & ACHIEVEMENTS

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- **Rubin Gruber SURE Award-2019** by McGill University, Montreal, CA.
- **Manipal Scholar Award-2016-17** by Manipal University, IN.
- Finalist in Provenance-2018, a B-Plan competition organized by Technology Business Incubator, MAHE, Manipal, IN.
- Token of Appreciation-2018, for enhancing the reputation of MAHE through Mars Rover Manipal, IN.
- Higher Distinction in IAPT-2016, International Association of Physics Teachers, IN.

## COURSES & CERTIFICATIONS

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- Robotics: Computational Motion Planning, *Coursera*.
- Introduction to Programming with MATLAB, *Coursera*.
- Intro to Digital Manufacturing with Autodesk Fusion 360, *Coursera*.
- Nanotechnology and Nano sensors, *Coursera*.

## EXTRA CURRICULAR ACTIVITIES

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- Photographer, Editor of a photography blog.
- Drone pilot.
- 3D Printing.

## NOTABLE POSITIONS

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- Founding Director, Mars Society South Asia. *MAY 2019 – Present*
- Research Lead, Mars Rover Manipal. *JUN 2018 – MAY 2019*
- R&D Manager, MRM – Perma Liner Industries LLC Team. *MAY 2019 – AUG 2019*

## REFERENCES

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Prof. Mark Driscoll, *Assistant Professor*, Dept. of Mechanical Engineering, McGill University, Canada,  
Dr. Ritwik Basu, *Principal (In-charge) and Associate Professor*, School of Metal Construction Skills, BSDU, Jaipur, IN,  
Dr. S.S.Sharma, *H.O.D.*, Mechanical Engineering, Manipal Institute of Technology, Manipal, IN,  
Navaneeth Krishna Varnekar, *Associate Professor*, Manipal Institute of Technology, Manipal, IN,  
Apoorv Bapat, Founder and CEO, Eleation CAE, IN,

## DECLARATION

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I hereby **declare** that the particulars of information and facts stated in this document are true, correct and complete to the best of my knowledge and belief.