

# Ashutosh Purohit

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## EDUCATION

### BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE

BE(Hons) Manufacturing Engineering  
Junior | Pilani, India  
CGPA: 8.38/10

### NAVRACHANA HIGHER SECONDARY SCHOOL

12th Graduation  
March 2015 | Baroda, India  
Percentage: 93%

### BHARTIYA VIDYA BHAVANS

10th Graduation  
March 2013 | Baroda, India  
CGPA: 10/10

## LINKS

Facebook://AshutoshP24

LinkedIn://AshutoshP

## COURSEWORK

### UNDERGRADUATE

Manufacturing Processes  
Manufacturing Management  
Fluid Mechanics  
Mechanics of Solids  
Kinematics and Dynamics of Mechanisms  
Machine Design and Drawing  
Applied Thermodynamics  
Object Oriented Programing  
Mechatronics and Automation(Ongoing)  
Metal Forming and Machining(Ongoing)  
Tool Fixture and Design(Ongoing)  
Supply Chain Management(Ongoing)  
Neural Networks and Fuzzy Logic(Ongoing)

### MOOCS

Neural Networks by Jefery Hinton  
Algorithms by California Institute of Technology

## SKILLS

### PROGRAMMING

Over 5000 lines  
• Java • C • Python

### SOFTWARES

• Solidworks • Linkage • COMSOL  
• Arduino

## EXPERIENCE

### INDIAN SPACE RESEARCH ORGANIZATION | RESEARCH INTERN

May 2017 - July 2017 | Jodhpur, India

- Created a **neural network implementing the googLENET algorithm** to detect windmills in a given satellite image and achieved an **accuracy of 95%**
- Mentored by **Dr Rakesh Paliwal, Sr Scientist, ISRO**
- The program so developed **will be used by ISRO for further research**

### DUBAI PRECAST CONCRETE | SUMMER INTERN

June 2016 - July 2016 | Dubai

- Paid intern** in the Design department
- Trained the design team to use SolidWorks in performing **stress-strain** as well as other simulations on hollow core slabs **decreasing on site structural failures by 6%**. Also **increased efficiency** of production chain by **15%**

## PROJECTS

### EFFECT OF CUTTING TOOL PARAMETERS ON SURFACE ROUGHNESS USING NEURAL NETWORKS | BITS PILANI

Feb 2017 | Pilani, India

Worked in a **2 membered team** to evaluate cutting tool parameters to obtain minimal surface roughness in a mild steel rod using neural networks

### DESIGNING AND MANUFACTURING A MANUAL DISK PROPELLING BOT | ABU ROBOCON 2017

Mar 2017 | Pune, India

Designed and manufactured a bot proficient in not only **throwing disks at a given distance and height**, but also **line following**, to compete in a pan Asia Competition

### DESIGNING AND MANUFACTURING AN AUTONOMOUS ROBOT AND A SEMI-AUTONOMOUS ROBOT | ABU ROBOCON 2016

Mar 2016 | Pune, India

Designed and Manufactured the Hybrid bot which is a **semi-autonomous robot** capable of **line following, climbing poles and also powering the Eco bot**, a small autonomous bot adept in line following, to compete in a pan Asia Competition

## AWARDS

2015 **City topper** and national rank **260**

National Science Talent Search Examination

2013 Awarded **High Distinction** by the **Royal Australian Chemical Institute**

Australian National Chemistry Quiz

2012 Awarded **Best Student Overall** by the **European House**

Education Excellence Awards

2011 Stood **3<sup>rd</sup>** in both **Kata and Kumite**

4th SKJFI National Karate Championship

## POSITIONS OF RESPONSIBILITY

- One of the six **core members** of the **Junior Placement Committee**
- Event Coordinator** of the Manufacturing Association
- Mechanical subsystem lead** for Team Robocon

## OTHER INFORMATION

- Member of **NIRMAAN**, one of the largest social service organization
- I'm a **technology lover** and have a passion for **designing new things**. I also love working on projects that are **challenging** and require **logical thinking**