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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

Feb 2017

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 SIMULATING A 3 AXIS MICRO ACCELEROMETER

November-December 2017

Designed a **micro electromechanical accelerometer** to measure acceleration in 3 axis, and simulated stress-strain and sensitivity using **COMSOL and SolidWorks**.

TRAJECTORY PLANNING FOR A 2-DOF ROBOTIC ARM

September-December 2016

Implemented **Genetic Algorithm** on **Python** to calculate the **most efficient path** for a robotic arm to move from the start to the end position given **multiple obstacles** in space.

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 **3rd 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**