



RAHUL KUMAR KUSHWAHA

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ACADEMIC DETAILS

Degree	Institute	Marks/CGPA
M.Tech in Mechanical(Production) Engineering (2017)	IIT Delhi	7.92
B.Tech in Mechanical Engineering (2013)	BIT Meerut	72.80

COURSES DONE

Metal Forming Analysis , Machining Processes And Analysis , Computer Aided Manufacturing , Metrology ,Welding Science And Technology, Advance Metal Forming, Composites, Thermodynamics, Heat Transfer, Power Plant Engg., RAC, SOM, Theory of Machine, Machine Design, Industrial Engineering, Fluid Mechanics & Machinery, Internal Combustion Engine.

INDUSTRIAL TRAINING

Braking system in Delhi Metro Train, Delhi Metro Rail Corporation LTD(Jun, 2012 - July, 2012)

Description - Braking system of DMRC is a mixture of Regenerative Braking and Electro Pneumatic Friction Brake.

IIT DELHI THESIS

Title – Surface Modification of Mild Steel through Friction Stir Processing.

Supervisor - Prof. S. Aravindan, Prof. Sunil Pandey

Description - Friction stir processing(FSP) is a solid state processing Technique that can be used effectively for the surface hardening of a material by significant micro structural changes in the stir processed zone due to combination of severe Plastic deformation, Thermal Exposure and Mechanical mixing of the material.

PROJECTS

- **Effect Of Solid Lubricant with Textured Tool on Cutting Forces & Machinability** (Sept, 2015 - Nov, 2015) : Project done in supervision of **Dr.S.Ghosh** shows significant reduction in Cutting Force & Cutting Power due to formation of low shear strength film & reduced contact length at tool tip due to grooves generated by EDM on rake face of tool and filled with solid lubricant Molybdenum Disulphide.
- **Design & Fabrication of Die and Punch for Femoral Head Manufacturing** (Aug, 2016 - Present) :
 - In the Supervision of **Prof. Naresh Bhatnagar**, Developed Die and Punch for Cold Isostatic Pressing of Zirconia. (Y-TZP) Slurry for femoral Head manufacturing.
- **Stair climbing robot** (Jan, 2013 - Jun, 2013) :
 - Stair Climbing Robot has been carried out with robot using different types of mechanisms using adjustable frame, staircase, circuit board, robot wheels.
 - It replaces the human in many fields like office, military tasks, hospital operations, industrial automation.

ACHIEVEMENTS

- Three Times GATE qualified

POSITIONS OF RESPONSIBILITY

- **Teaching Assistant** (Aug, 2016 - Present) :
 - Mentoring and Guiding 40+ students in better learning of Machine Tool Workshops and evaluating students performance.
 - Mentoring and Guiding 25+ students in better visualization and learning of *Mechanisms and Motions* in course with title **Theory of Machines**.

OTHER INTERESTS

Reading Technical Books, Research Projects, Teaching, Travelling.