



# KARANVEER SINGH



## ACADEMIC DETAILS

Year	Degree / Exam	Institute	GPA/Marks(%)
----	M.Tech in Production Engineering	Indian Institute of Technology Delhi	8.88
2010	CBSE	Saint Fateh Singh Convent School Bathinda	83.2%
2008	CBSE	Dashmesh Public School Faridkot	89.6%

## DEGREES PRIOR TO IIT

University	Examination	GPA / Marks(%)
Indian Institute of Technology Ropar (2010-2014)	B.Tech In Mechanical Engineering	8.17/10

## COURSES DONE

Experimental Methods , Metal Forming Analysis , Machining Processes And Analys , Computational Methods , Computer Aided Manufacturing , Metrology , Welding Science And Technology .

## INDUSTRIAL TRAINING

**Comparative Study Of Thermo-Mechanically Processed Cu-Cr Alloy And Its Ternary And Quaternary Alloy Systems**, Non Ferrous materials Technology Development Centre (NFTDC) HYDERABAD (May, 2013 - July, 2013)

- Description** - • This work describes preparation of six different alloys of copper with hot hardness property.  
• Metallurgical testing of these six alloys.

## IIT DELHI THESIS

**Title** - Tribological characterization of surface composites.

**Supervisor** - Dr. S. Aravindan

- Description** - • The project is an industrial challenge faced by chain manufacturer. Pin used in chains has a limited life due to its wear.  
• In this project, we intend to make this pin stronger by making this pin a surface composite using diffusion at high temperature.

## SCHOLASTIC ACHIEVEMENTS

- **IIT-JEE 2010 Qualified** : Secured All India Rank 3765.
- **Winner of Autospark Workshop at Thapar University** : Made design of an All Terrain Vehicle (ATV) and verified its various failure parts.
- **Young Thinker Scheme** : Under this scheme of Government of Haryana, submitted my innovative idea which was shortlisted for Presentation.
- **German qualified** : Completed a course in German (Level I) under Foreign Languages Programme of IIT Delhi.

## PROJECTS

- **Fabrication of test rig for investigating erosion corrosion behavior of Pure Al, Al-6061 and Al-5083. (BTP)** :
  - This project was aimed to fabricate a setup which can be used to investigate the effect of erosion and corrosion individually as well as in synergism.
- **Die casting parameter optimization to get maximum tensile strength** :
  - In this project, matlab code was made and used to optimize die casting parameters.
- **Clutch disc wear analysis.**
- **Manufacturing of Composites using Casting and Friction stir processing.**

## TECHNICAL SKILLS

- C++, Matlab, Solidworks, Creo, CNC Programming
- Wire-EDM, 3-D Printer, Scanning electron microscope, Nano indenter, Profilometer, Tribometer, CNC milling

## EXTRA CURRICULAR ACTIVITIES

- **Participated in 48th Inter IIT Sports Meet** : Member of the Athletics Team.
- **Group Discussion** : Participated in GD during Zeitgeist 2013 at IIT Ropar
- **National Service Scheme** : Was part of NSS IIT Ropar

## POSITIONS OF RESPONSIBILITY

- **Member, Executive committee Alumni Association IIT Ropar** (Nov, 2014 - Nov, 2015)
- **Teaching Assistant** (Jun, 2015 - Present) : Assisted senior faculty members in Course titled Product Realization by Manufacturing and helped undergraduate students in Lab.