Sanjeev Kumar

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Education			
2017-19	IIT Gandhinagar	M.Tech (Mechanical Engineering)	7.14/10 (CGPA)
2013-16	SLIET Longowal	BE (Mechanical Engineering)	7.85/10 (CGPA)
2011-13	SLIET Longowal	Diploma(Industrial & Production Engg)	77.32 %
2009-11	Adwaita Mission High School, Banka	Class XII (CBSE)	69.40 %
2009	Jawahar Navodaya Vidyalaya, Banka	Class X (CBSE)	88.60 %

Internships

- Steel Authority of India Limited, Bokaro.
 - Practical training in all shops in the production department

Projects

M.Tech thesis project:

- Nonlinear Modal Interaction in Inflated Beam Structure.
 - Advisor: Prof. K.R. Jayaprakash, Assistant Professor, IIT Gandhinagar
 - o Finding: Established the instability zone for various axial initial conditions, where, by exciting only the axial mode, the flexural mode got excited and exhibits large amplitude oscillation.

Term Project:

- Developed the relationship for natural frequency and buckling load of pre-stressed Euler-Bernoulli cantilever beam in MAPLE and modeled it in ABAQUS.
- Stress calculation of spur gear and its theoretical validation in ANSYS.
- Nonlinear response of mass on a hinged slider with springs at ends with modeling in MATLAB.
- Made a physical model of a magnetic pendulum to show the double-well potential and nature of equilibrium points.

BE Project:

- To analyze the mechanical properties of weld joint done by Friction Stir Welding (FSW) on Aluminum 6061 grade under Prof. J.S. Gill, Associate Professor, SLIET Longowal.
 - Finding: The best mechanical properties of the weld can be obtained at the tool rotation speed of 1150 rpm with a feed of 25mm/min.

Positions of responsibility

- Captain in college robotics committee
 - Design the kinematics of robot playing badminton, made a plan for all members to have a feel of involvement in the project.
- House captain during school time.
 - o Learned how to maintain discipline, planned some inter-house events.
- Worked as a volunteer with club NYASA IIT Gandhinagar
 - Organized Health Mela (Sanjeevani): Got exposure to crowd and resources management, designed games and activity to convey the message to the public.
 - o Taught the kids: Tried to develop the interest in mathematics, learned some art to get attention.

Hobbies & extra-curricular activities

- Practicing Karate (blue belt), Swimming & Running.
- Playing chess, playing drum, Singing.
- Drawing, Designing models for illustrating mathematics.