ATUL KUMAR GAUTAM

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M.Tech (Mechanical Engineering)

CAREER OBJECTIVE

To secure a responsible career opportunity and fully utilize my skills and training while making all possible efforts to achieve best results. I want to be a valuable resource for my organization.

EDUCATIONAL QUALIFICATIONS

YEAR	DEGREE	INSTITUTE/BOARD	CPI/%
2020-Till date	Master of Technology	Indian Institute of Technology Kanpur	7.43
2015-19	Bachelor of Technology	Feroze Gandhi Institute of Engg. & Technology, Raebareli	71.48%
2013	Class XII	U.P. Board	74.40%
2011	Class X	U.P. Board	67.17%

M.TECH. THESIS | Thesis Supervisor : Prof. SUMIT BASU (May 31,2021 – Present)

TITLE : Correcting the Drift Distortion of SEM images for effective Digital Image Correlation

- The objective of this project is to create a **user friendly GUI** for **correcting the Drift Distortion** of SEM images in order to get the better **Digital image Correlation(DIC)** in **MATLAB**.
- Finding **change in drift** for each pixel location by performing **DIC** on consecutive images in pair using **NCORR**.
- Studying on **Scanning electron microscope** to get the required knowledge.

B.TECH. PROJECT | Project Supervisor : Dr. Mohd. Tauqeer (Associate Professor) (Jan 13,2019 – Jun 9,2019)

TITLE : Automatic Double Hacksaw Cutting

- The objective of this project is to **Automate the conventional power hacksaw machine** in order to achieve the **high productivity** of work-pieces.
- DC motor used to drive the Shaft can also be operated with the help of conventional source of energy like **solar energy.**
- Automatic Double Hacksaw Machine cuts the work-pieces simultaneously to get the **high speed cutting rate** and **mass production.**

POSITION OF RESPONSIBILITY

Teaching Assistant for the course ME621A (Introduction to Solid Mechanics) at IIT Kanpur (*continuing from August 9,2021*)

- Assisted instructor with grading the assignments.
- Assisted in timely conduct of sessions.

ACADEMIC PROJECTS | TERM PAPERS

- **Some Exact Closed Form Solutions for Transient Response of a Cylindrically Anisotropic Elastic Solid Subjected to Three types of a Ring Source.** *(Jan'21)*
  [Course Project | Instructor : Prof. Basant Lal Sharma, IIT Kanpur]
- **Stresses in a Long Hollow Cylinder Subjected to a Band of Uniform Pressure on the Outer Surface.** *(Feb'21)*
  [Course Project | Instructor : Prof. Basant Lal Sharma, IIT Kanpur]
- **The Finite Inflation of an Elastic Toroidal Membrane of Circular Cross-section.** *(March'21)*
  [Course Project | Instructor : Prof. Basant Lal Sharma, IIT Kanpur]
- **Case Study of Light, Medium and Heavy duty trucks using Quality Function Deployment.** *(May'21)*
  [Course Project | Instructor : Prof. Niraj Sinha, IIT Kanpur]

SKILLS	MATLAB, Solid Works, LaTeX, Ncorr(DIC), MS Office, SEM, Python
AREA OF INTEREST	Solid Mechanics | Manufacturing Process | Industrial Engineering | Kinematics of Machine
HOBBIES	Table tennis, Cricket, Badminton, Travelling, Singing

RELEVANT COURSE WORK

Introduction to Solid Mechanics | Introduction to Continuum Mechanics | Applied Dynamics and Vibration | Finite Element Methods | Design for Manufacturing and Assembly | Fracture and Fatigue | Vibration Control

EXTRA CURRICULAR

- Completed internship on **Flanges inspection & Heat treatment** conducted by R.D. FORGE *(Jun'18 – Jul'18)*
- Participated in **Inter branch cricket tournament** in college *in year 2015 and 2019.*