Shivji Prasad Yadav

Research Scholar
Department of Mechanical Engineering
Indian Institute of Technology Bombay

+91-9304029210
Email: 194100008@iitb.ac.in
http://homepages.iitb.ac.in/~194100008
www.linkedin.com/in/shivji-prasad-yadav

Education

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
Ph.D	Indian Institute of Technology, Bombay	8.71	2019 - Present
M.Tech	Indian Institute of Technology, Guwahati	8.95	2017 - 2019
B.Tech	Guru Ghasidas University, Bilaspur	9.06	2013 - 2017
Intermediate	Nagaland Board of School Education	84.0%	2013

Achievements

- Secured **Rank 6** in **HSSLC Examination, 2013** (Nagaland Board of School Education).
- Secured **State highest** in **Mathematics (100)** in **HSSLC Examination, 2013** (Nagaland Board of School Education).

Projects

- **Simulation of Red Blood Cells in Blood Flow in Micro-channels**   (*Ongoing*)
  Supervisor: Prof. Amit Agrawal and Prof. Atul Sharma, Department of Mechanical Engg., IIT Bombay
  - ❖ To model the hybrid approach (Dissipative Particle Dynamics and Smooth Particle Hydrodynamic) for simulation of red blood cells in blood flows.
  - ❖ To study the change of mechanical and dynamic properties of RBCs in blood-related diseases and disorders.
- **Development of Steady State Coupled Solver for Incompressible Flows**   (*May 2018-May 2019*)
  Supervisor: Prof. Amaresh Dalal (IIT Guwahati) and Prof. Ganesh Natarajan (IIT Palakkad)
  - ❖ To develop a **fully coupled implicit algorithm** to solve steady state incompressible fluid flow problems based on collocated **finite volume** formulations using unstructured grids.
- **Harnessing Wind Energy Through Electric Car**   (*Dec 2016-Apr 2017*)
  Supervisor: Mrs. Shweta Singh, Assistant Professor, Dept. of Mechanical Engg., Guru Ghasidas University
  - ❖ A working model and solid model in Creo/ProE is made to harness wind energy through the motion of electric car.
- **Utilization of Waste Heat from the Power Plant using Binary Vapour Cycle**   (*Jun 2016-Nov 2016*)
  Supervisor: Mrs. Shweta Singh, Assistant Professor, Dept. of Mechanical Engg., Guru Ghasidas University
  - ❖ Based on utilizing the heat rejected by steam power plant using binary vapour cycle.
  - ❖ Work mainly on our Secondary fluid for using heat rejection by steam power plant

Technical and Software Skills

- **Programming languages:** C++, Matlab
- **Simulation and Modelling Software:** Creo/ProE, AutoCAD, SOLIDWORKS, GAMBIT

Experience/Training

- Teaching Assistant
  - ❖ Fuels and Combustion
  - ❖ Engineering Graphics and Drawing
  - ❖ Fluid Mechanics I
  - ❖ Material Science Laboratory
- TML Drivelines Limited, Jamshedpur
- Central Tool Room and Training Centre, Bhubaneshwar
- National Service Scheme, (Guru Ghasidas University)