Rishabh Prakash Sharma

Department of Energy Science and Engineering
IIT Bombay
Mumbai 400076, India

rishabhstein@gmail.com
Skype: hrishabh_ps009
Phone: +919917846757

Research Interests

Numerical Methods, Multi-physics simulations, Scientific Computation, Computational fluid dynamics.

Me

Thapar University, Thermal Engineering (8.00 CGPA) **July 2015 - Aug 2017**
- Nodal Integral Method for convection-diffusion transport in complex domain using linear and higher order quadrilateral elements
- Advisor: Professor Neeraj Kumar

Btech

U.P Technical University, Mechanical Engineering (71.4%) **July 2010 - July 2014**
- Honors in Engineering Physics, Mathematics and Mechanics
- Filed a patent on academic project,'Design and development of a Manual Reaper'

Research Experience

Indian Institute of Technology- Bombay **Sep 2017- Present**
- Project Research Associate, Department of Energy Science and Engineering. Mar 2018- Present
Simulation and study of non-linear ultrasonic waves using k-space method.
- Project Research Associate, Department of Aerospace Engineering Sep 2017-Feb 2018
Studies related to Particulate flow using Open Source packages (CFDEM, OpenFoam, and LIGGGHTS).

Honors And Awards

Participated in a course titled,"FEM for analysis of non-linear problems" by Dr. R.C. Batra	**2017**
Monthly stipend for GATE qualified student for graduate studies	**2015-2017**
Secured, 91.7 % in Graduate Aptitude Test in Engineering (GATE)	**2015**
Scholarship of Merit-incentive provided by the institute	**2010-2014**
National Counsel of Vocational Training, 82% in programming diploma	**2010**
Secured 90% in physics at secondary high school	**2009**
Secured 94% in physics at high school	**2007**
Secured 11th position at zonal (7 districts) level in 7th Pioneer Science Competition	**2006**

Scientific Computing Skills

Languages	FORTRAN, C, Python
OS	Linux, Windows,
CFD Tools	OpenFoam, Ansys-Fluent
Other tools	LIGGGHTS, MatLab, LaTeX, Tecplot, Paraview, Mathematica

Journal Articles

[1] **Rishabh Prakash Sharma**, Neeraj Kumar, "Nodal Integral Method for convection-diffusion transport using linear and higher order quadrilateral elements", Numerical Heat Transfer-B https://doi.org/10.1080/10407790.2018.1523596

Conference Articles

[2] **Rishabh Prakash Sharma**, Neeraj Kumar, "Nodal Integral Method for complex geometries using higher order elements", **Proceedings of the 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTC-2017)** http://ishmtdigitallibrary.com/conferences/IHMTC-012432

[3] **Rishabh Prakash Sharma**, Rahul Singh,"Innovation at apexes of Wankel rotary Engine", **Indo-Russian Round Table held on Oct-2012** at New Delhi.