

# Dr. PRAVEEN LAWS

 Aerodynamicist | CFD | Wind Engineer |  
OpenFOAM | ANSYS Fluent |

 New Delhi,  
INDIA



## PERSONAL INFO

BIRTH DATE

29 May 1987

NATIONALITY

Indian

YEARS OF EXPERIENCE

5 years

## ABOUT ME

An eminent CFD engineer in the field of aerodynamics, rotor dynamics, wind-driven turbine cluster, extraction of wind power from any moving bluff body and Drone wake study. I am a specialist in performing rotor dynamic simulation in both OpenFOAM and ANSYS Fluent.

9

Publications

7

Projects

## EDUCATION

- 2020  Ph.D. [Mechanical Engineering]  
Shiv Nadar University
- 2013  M.S [Aeronautical Engineering]  
Hindustan University
- 2009  B. Tech [Aeronautical Engineering]  
Sathyabama Institute of Science and  
Technology

## CONTACT INFO

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LINKEDIN

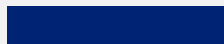
Dr. Praveen Laws

## CAREER TIMELINE



## LANGUAGES

ENGLISH



TAMIL



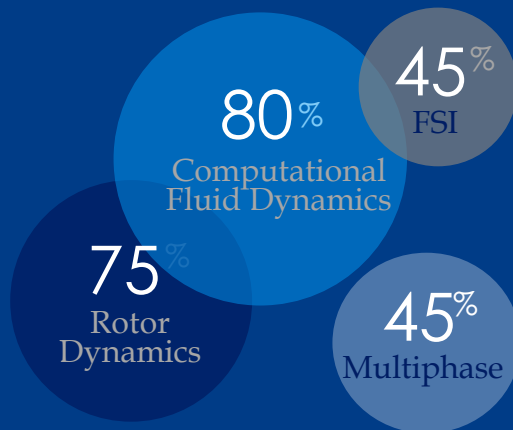
HINDI



## HOBBIES



## EXPERTISE

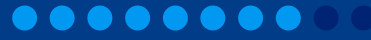


## SKILLS

OpenFOAM



Ansyes Fluent



C - Programming



Gmsh



Paraview



## PROFESSIONAL INTEREST

- Aerodynamics
- Computational fluid dynamics
- Fluid mechanics
- Wind energy

## RESEARCH EXPERIENCE

- Numerical modelling of modified Savonius wind turbines
- Wind driven characterization of single and cluster arrangement of turbines
- Modelling of wind power generation from moving bluff body

## ARTICLES PUBLISHED

- Laws, P., Kumar, A. and Mitra, S., 2020. A numerical study towards harvesting power from train slipstream using savonius rotor. **Journal of Energy Resources Technology**, pp.1-40.
- Laws, P., Saini, J.S., Kumar, A. and Mitra, S., 2020. Improvement in Savonius Wind Turbines Efficiency by Modification of Blade Designs – A Numerical Study. **Journal of Energy Resources Technology**, 142(6).
- Laws, P., Bethi, R.V., Kumar, P. and Mitra, S., 2019. Improved design of Savonius rotor for green energy production from moving Singapore metropolitan rapid transit train inside tunnel. Proceedings of the Institution of Mechanical Engineers, **Part C: Journal of Mechanical Engineering Science**, 233(7), pp.2426-2441.
- Bethi, R.V., Laws, P., Kumar, P. and Mitra, S., 2019. Modified Savonius wind turbine for harvesting wind energy from trains moving in tunnels. **Renewable energy**, 135, pp.1056-1063.
- Laws, P., Aditya, B., Bethi, R.V. and Mitra, S., 2017. Parametric Sensitivity Analysis of Vertical Axis Wind Turbine. **International Journal of Mechanical Engineering and Robotics Research**, 6(5).
- Laws, P.; Saini, J.S.; Kumar, A. A Study on OpenFOAM's Overset Mesh Support Using Flow Past NACA 0018 Airfoil. Preprints 2019, 2019070217 (doi: 10.20944/preprints201907.0217.v1).

## REFEREES

- ❑ Dr. Santanu Mitra  
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Department of Mechanical Engineering  
Shiv Nadar University  
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- ❑ Dr. Ajit Kumar  
Assistant Professor  
Department of Mathematics  
Shiv Nadar University  
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- ❑ Dr. Nishant Mishra  
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- ❑ Dr. Pankaj Kumar  
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