

Abhishek Singh

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Education

- 2022–Present **Purdue University**,
Mechanical Engineering, Master of Science.
GPA – 4/4
- 2018–2022 **Indian Institute of Technology Mandi**,
Mechanical Engineering, Bachelor of Technology.
GPA – 9.11/10

Research Interests

Experimental Fluid Dynamics
3D Particle Image Velocimetry

Signal and Image Processing
Uncertainty Estimation

Turbulent Flows
4D Flow MRI

Current Position

- August 2022–Present **Graduate Research Assistant**, VLACHOS RESEARCH GROUP, Purdue University.
- Working on the 3D PIV and preferential concentration study in the flow of an oral drug dissolution tester (USP Apparatus 2)
 - Working with uncertainty estimation and field reconstruction techniques on 4D Flow MRI Measurements for improved quantification of haemodynamics and derived biomarkers in Cerebral Aneurysm and Intrathecal space.

Conference Proceedings

- Singh, A.** and Kumar, P., “Dynamics of the Drop Impact Phenomenon onto a Deep Liquid Pool with Initial Axisymmetric Wavy Interface”, 8th International and 47th National Conference on Fluid Mechanics and Fluid Power (FMFP), December 9-11, 2020, IIT Guwahati, India.
- Singh, A.** and Kumar, P., “Impact of droplet on a superhydrophobic curved surface”, 26th National and 4th International ISHMT-ASTFE Heat and Mass Transfer Conference December 17-20, 2021, IIT Madras, India.

Journal Publication

Singh, A. and Kumar, P., "Droplet impact dynamics onto a deep liquid pool of wavy free surface", *Physics of Fluids* 34, 022107 (2022) <https://doi.org/10.1063/5.0084530>

References

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