

Name of Teaching Staff	:	Prof. Vinit Katira	
Designation	:	Assistant Professor	
Department	:	Mechanical Engineering	
Date of Joining the Institution	:	08.07.2014	
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Google Scholar Link	:	https://scholar.google.com/citations?view_op=list_works&hl=en&hl=en&user=iIgbSc0AAAAJ	
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Qualifications with Class / Grade	:	Ph.D. (Pursuing) M. Tech. (Thermal Engineering) – Sardar Patel College of Engineering, Andheri, Mumbai B.E. (Mechanical Engineering) – K. J. Somaiya College of Engineering, Vidya Vihar, Mumbai	
Total Experience in Years	:	<u>Teaching:</u> Assistant Professor – D. J. Sanghvi College of Engineering, Mumbai, July 2014 to till date <u>Research:</u> Research Assistant: Department of Mechanical Engineering, I. I. T. Bombay, Powai, Mumbai - 400 076, India, July 2012 – July 2014	
Papers Published in Journal:	:	<u>National & International Journals:</u> [1] Adwait Sawant, Meher Dev Gudela, Ajit Karnik and Vinit Katira, "Design and Analysis of a Pneumatically Actuated Drag Reduction System," SAE Technical Paper 2021-01-5080, 2021, https://doi.org/10.4271/2021-01-5080 . [2] Ruchit Doshi, Shakshi Himmatramka, Janam Sanghavi, Jahnvi Patel and Vinit Katira, “Automobile Radiator Design and Validation”, International Research Journal of Engineering and Technology, vol. 05 issue 11 (2018) pp. 1358 – 1365 [3] Exploring Challenges in Sustainable Plastics Waste Management in India, Shivali Gawde, Dr.K.N. Vijaykumar, Vinit Katira, Journal of Advanced Research in Dynamical and Control Systems, vol. 12 (2020), pp 2457-2462. [4] An experimental study on performance characteristics of a CNG-hydrogen fueled Spark- Ignition engine (Submitted - Under review)	

Papers Presented in Conferences	[1] “Design and Performance Evaluation of a Cost-Effective Radiant Cooling System” in “International Conference on Intelligent Manufacturing and Automation 2020”, pp. 777-789. [2] “Design, Analysis and Optimization of a Single-Pass Straight Pipe Resonator for an Exhaust System of a Single Cylinder Engine” in “International Conference on Intelligent Manufacturing and Automation 2020”, pp. 603-613. [3] “Analysis and Manufacturing of Aerodynamic Components” in “International Conference on Intelligent Manufacturing and Automation 2020”, pp. 187-199. [4] Comparative analysis of radiative heat flux using ASHRAE correlations and ANSYS simulations for cooling applications, Vinit Katira, Ajay Gangrade, Kashinath Patil, 2nd International Conference on Technologies for Energy, Agriculture, and Healthcare, 2025 [5] Performance Analysis of Radiant Cooling Panel Designs: CFD Validation and Geometry-Based Enhancements, Vinit Katira, Ajay Gangrade, Kashinath Patil, International Conference on Smart Mechanical Systems for Sustainability (ICMSS), 2025		
Area of Specialization	:	HVAC, Radiant Heating & Cooling, Automotive propulsion & safety systems, Power engineering.	
Books Published / IPRs / Patents	:	Design Registration	1. Title: Intake Manifold For Two - Wheeler Engines Design number: 318182-001 Date of registration: 28/05/2019 2. Title: Torque Enhancer Design number: 318181-001 Date of registration: 28/05/2019 3. Title: Composite Anti Intrusion Plate Design number: 379355-001 Date of registration: 15/02/2023
Professional Memberships	:	Member of Professional Society:	Life Member of Indian Society of Manufacturing Engineers (ISME)
Interaction with Professional Institutions	:	Other Achievements and Responsibilities:	Organizing committee of 3 day Webinar Series on “Emerging Frontiers of Research in Energy Systems” at DJSCE, August 2021
Subjects Taught	:	<u>UG Level:</u> Refrigeration & Air-conditioning Internal Combustion Engines Automobile Engineering Thermal & Fluid Power Engineering Mechanical Utility Systems Power Engineering Automotive Prime Movers Automotive Systems Motorsports Engineering	

		Creative Engineering Design Design Thinking Vehicle Testing & Safety	
Projects Guided	:	<u>UG Level:</u> more than 20 Some of UG Project Guided: 1. Design and Analysis of a Hybrid Drivetrain 2. Design, analysis and weight optimization of suspension system of an off-road vehicle 3. Design and analysis of a torque converter using an electro-hydraulic system 4. Engine Management System and optimization of Intake and Exhaust System of a Formula styled car 5. Automated removal of Burnished surface on Deep Drawn blanks 6. Optimization of suspension wishbone by use of carbon fibre reinforced plastic for Formula Student car 7. Design and manufacturing of 3D printer prototype 8. Design and Shape Optimization of Vertical Axis Wind Turbine for Highways	
Recommended Students for Higher Education	:	<u>Name of the Student</u> More than 70 students for PG studies	<u>University/Industry</u> Various Universities across USA, Canada & Germany
Institute/Department Responsibility handled:	:	• Admission committee member • Project coordinator at Dept. level • Industrial visit coordinator at Dept. level • Co-convener DJS Trinity Team • Faculty advisor to DJS Racing Team of SAE DJSCE	
Pedagogy Development	:	E-learning videos for the courses of Refrigeration & Air-conditioning and Power Engg.	