Ramanshi Mourya

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| Academic Qualifications | | | | |
| Year | **Qualification/Degree** | **Institute/School** | | Performance |
| *2021-2023* | MTech, Solid Mechanics and Design | IIT Kanpur | | 7.75/10 |
| *2021* | BTech, Mechanical Engineering | Ujjain Engineering College, Ujjain | | 8.58/10 |
| *2017* | Class XII (CBSE) | Kendriya Vidyalaya Ujjain | | 88.20% |
| *2015* | Class X (CBSE) | Kendriya Vidyalaya Ujjain | | 10/10 |
| M.Tech. Thesis Supervisor: Dr. Nachiketa Tiwari | | | | |
| Noise and Vibrational Studies for Radial Ultra High-Performance Tires *Aug’22-Current* | | | | |
| * Natural frequency extraction of a tire and analyze the noise caused due to vibrations. * To find out the shape of the FRF curve of a radial ultra-high-performance tire. * Analysis of tire considering geometric and material nonlinearity along with considering the damping effect with a 3Dgenerated model using the symmetric model generation approach with the help of the ABAQUS simulation tool. * This project will help to reduce the analysis cost of radial tires. | | | | |
| Projects | | | | |
| Modal Analysis: Theory And Practice (ME730A) | Dr. Mohit Law (course project-*Mar’22*)  Visual Vibrometry   * To estimate the motion of cutting tools (Endmill, Grooving Blade, and Boring Bar) from their recorded video, and from that registered motion to extract modal parameters of interest. * Obtaining the significant frequencies from an FFT from the impulse response. | | | | |
| B. Tech Project Supervisor: Dr. V.K. Sukhwani | | | | |
| Effective use of Smart Material in Automobiles *Nov’20 - May’21* | | | | |
| * To understand the properties of smart materials like piezoelectric material, shape memory alloy, magnetostrictive material, electrorheological fluids, conducting polymers, and optical fibers. * To show that by incorporating smart materials, their intrinsic sensing and actuating capabilities into structural elements of vehicles, smart materials can be found great promise in automotive applications. | | | | |
| Certification Courses | | | | |
| * AutoCAD 2021 course: [Both 2D and 3D]- Mechanical by Udemy. * MATLAB Onramp course (self-paced training course) by MathWorks. * MATLAB Fundamental course by MathWorks. * ABAQUS CAE: Learn Static and Dynamic Analysis. By Udemy. | | | | |
| Scholastic Achievements | | | | |
| * Secured All India Rank 4954 in GATE 2021 Mechanical among 1,20,594 candidates*. (2021)* * Secured the First position in order of merit in the Mechanical Department in 2nd and 3rd Year during B.Tech. *(2019 and 2020)* * Received congratulating letter from honorable Smriti Zubin Irani (Minister of Human Resource Development) for performing well in the CBSE examination. *(2015)* * Awarded Certificate of Merit in Class 10 for achieving a 10 CGPA. *(2016)* * Achieved first place in the quiz competition, junior division of The National Consortium/Science Festival “From Photonics to Economic Impact of Light." *(2016)* | | | | |
| Internships | | | | |
| Study of Boilers (Empirical Exergy private limited (EEPL), Indore), from *1st May to 30th May 2019.*   * Accessories and mountings of the boiler- Economizer, Preheater, Super-Heater, Reheater, Ash Handling System, Types of boilers, fuels used, use of boiler in food industries. * Processes involved in the food industry-cooking, sanitizing, processing, and packaging in the food industry. | | | | |
| Technical Skills | | | | |
| Skills: ABAQUS, Basic of Nastran Patron, AutoCAD, MS- Excel, MS-Word.  Programming Languages: Python, MATLAB | | | | |
| Relevant Courses | | | | |
| * Introduction To Solid Mechanics * Applied Dynamics and Vibrations * Finite Element Methods in Engineering Mechanics * Mathematics for Engineers | | | * Computer-Aided Engineering Design * Basic Control System for Mechanical Engineers * Modal Analysis: Theory and Practice * Applied Numerical Methods. | |
| Extracurricular Activities | | | | |
| * Participated in Bottle Rocket competition in Mech Tech Meet during B.Tech. (2018) * Participated in sports activities like Race, Basket Ball, and Badminton. | | | | |