PRATEEK KULKARNI

Prateek Kulkarni joined VACC in 2017, bringing academic experience in vibrations and elastic wave propagation in nonlinear systems. With solid experimental research background, he is proficient with CAD, FEA and testing procedures. Owing to programming and signal processing experience, he is skilled at signal analysis as applicable to system dynamics and acoustics.

He is involved with pedestal vibration analysis projects using FEA and is out in the field performing various types of vibro-acoustic testing such as ambient vibration surveys for research buildings, hospitals and so on. He applies his previous CAD, Design, Manufacturing and programming experience to overcome technical difficulties. Recent activities include developing lumped-parameter based methods for modeling elastic wave propagation through periodic resonant metamaterials and characterizing the behavior of Nonlinear and Inertant acoustic metamaterials, resulting in potential novel applications such as Directional propagation of elastic waves and Ultra-low frequency filtering.

Work Experience:

2017-Present	*Jr Associate,* Vibro-Acoustic Consultants
2014-2017	Graduate Research Assistant, Oklahoma State University
2013-2014	CAD Engineer, iLensys Technologies Pvt Ltd
2012-2013	Design Engineer, Plazma Technologies Pvt Ltd

Education: **M.S**, **Mechanical and Aerospace Engineering,** Oklahoma State University, Stillwater, OK, 2016

Honors/Societies: Member, American Society of Mechanical Engineers

Recent Notable Projects:

94th International Residential Housing: Sound Insulation measurement (STC)

University of Washington Research Center: Ambient Vibration and Noise Measurements

VA Medical Center: Continuous Construction Noise Monitoring

Ochsner Medical Center: Site Vibration Survey for MRI installation

Society of Experimental Mechanics: Nonlinear and Inertant Acoustic Metamaterials and Their device implications

Journal of Applied Physics: Longitudinal elastic wave propagation through Inertant Acoustic Metamaterials

35th AIAA/ASME Conference: Direction-Biased Acoustic Metamaterial Waveguide