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OBJECTIVE

To be in a challenging position where my **broad-based technical skills** help in executing projects, both time bound and quality conscious, working in a **challenging** and prospective environment **adding value** to both the organization and my career in return.

EDUCATION

Program	Institution	%/CGPA	Completion
M.S in Mechanical Engineering	Indian Institute of Technology Madras, Chennai	8.00/10	2020
B.E in Mechanical Engineering	GITAM College of Engineering, Visakhapatnam	63.74	2006
XII	Excel Junior College, Visakhapatnam	83.9	2002
X	Visakha Tutorial College, Visakhapatnam	58.5	2000

ACADEMIC PROJECTS

M.S Project	<p>Scattering studies of guided waves from surface breaking notch-like defects in plates and pipes with application to higher temperatures</p> <ul style="list-style-type: none"> Finite Element Simulations were simulated using Abaqus 6.12 and Experiments are carried out for validating the simulated results. Study the reflection coefficient behavior with the interaction of defects. Study, for the first time, the effect of temperature gradient on wave propagation while inspecting the plates/pipes at higher temperature regions up to 750°C.
B.E Project	<p>Design and Analysis of Electro-Mechanical Load Cell</p> <ul style="list-style-type: none"> The main aim of this project is to improve the range of the load. Structural analysis is carried out for the main member component of the load cell with the help of ANSYS. Various materials were studied and stresses & strains were compared.

PROFESSIONAL EXPERIENCE

<p>Assistant Professor (Ad-hoc) <i>Adikavi Nannaya University, University College of Engineering</i> <i>Since June '21</i></p>	<ul style="list-style-type: none"> Teaching courses for UG graduates. Course's handling Engineering Mechanics for Civil and Mechanical branches. Core courses for Mechanical are Dynamics of Machinery, NDE, MCMT, CAD/CAM and Robotics
<p>Assistant Professor <i>Vignan's Institute of Information Technology</i> <i>June '17 – June '21</i></p>	<ul style="list-style-type: none"> Taught courses for PG and UG graduates. Courses like Finite Element Analysis, NDE, Robotics, Computer Graphics and Geometric Modelling Assisted as a Training & Placement Coordinator at the department level. Coordinator for APSSDC, Siemens Skill Development & Training Programs for students. Guided in projects for one MTech student and BTech students (6 Batches).
<p>Research Associate <i>IIT Madras</i> <i>October '08 – January '14</i></p>	<ul style="list-style-type: none"> Assisted Prof. Krishnan Balasubramaniam in conducting various courses and giving demonstrations on various NDT techniques and conducted several workshops Analyzing the problem and choosing the best of NDT methods for solving a particular problem Worked on various projects with clients like AIRBUS, EADS, IGCAR, BHEL, Southern Railways etc.
<p>Senior Lecturer <i>Mega Junior College</i> <i>February '08 - September '08</i></p>	<ul style="list-style-type: none"> Taught courses such as Mathematics and Chemistry for Intermediate students at IIT level.
<p>Software Engineer <i>Techway Communications Private Ltd.</i> <i>August '06 - January '08</i></p>	<ul style="list-style-type: none"> Developed mobile applications like Graphical User Interface and Games using J2ME.

SKILLS

Computational	<ul style="list-style-type: none"> FEM Packages : ABAQUS/EXPLICIT, Hypermesh, ANSYS, COMSOL Multiphysics Modelling tools : NX Design (Siemens Certified), Catia, Solidworks and AutoCAD Programming languages : C, JAVA, J2ME, LabVIEW and MATLAB Web design languages : HTML, DHTML
Personal	<ul style="list-style-type: none"> Strong analytical & logical thinking ability Comprehensive problem solving Good communication skills Effective decision making and Target Oriented Proficient in the Object-Oriented Concepts

COURSEWORK

- Advanced Non-Destructive Evaluation
- Acoustics and Noise Control
- Elastic Waves and Ultrasonics
- Finite Element Analysis
- Non-Destructive Evaluation of Structures
- Computational Methods in Engineering

EXTRA CURRICUCULAR ACTIVITIES AND RESPONSIBILITIES

Governance	Super Coordinator (PG), MITr, IIT Madras (2015-2016) <ul style="list-style-type: none"> Organized various technical seminars, talks, departmental orientations. Tried to resolve student related problems through personal counseling.
	Student Secretary, Sindhu Hostel, IIT Madras (2015-2016) <ul style="list-style-type: none"> Headed the governing council of the hostel. Responsible for organizing and managing various hostel activities.
Sports	Sports Coordinator, Vignan's Institute of Information Technology (2018-2021) <ul style="list-style-type: none"> Headed the governing council and Organized various sports events at departmental and at institute level.
	Captain of Cricket Team (2014-2016) <ul style="list-style-type: none"> Team went on to win silver & bronze medal(twice) for the first time among post graduate hostels in the intra IIT sports. Part of Hostel Badminton team (2014-2016) <ul style="list-style-type: none"> Went on to win bronze medal twice in the intra IIT sports.
Arts	Martial Arts (2009-2011) <ul style="list-style-type: none"> Yellow with Green Stripe Belt (up to 4th level) in Hapkido – A self-defense based Korean Martial Arts.
	Part of Hostel Dance Team (2009-2012) <ul style="list-style-type: none"> Represented hostel in various dance competitions in Institute.

PUBLICATIONS & CONFERENCES

SCI Publications	<ul style="list-style-type: none"> Sri Harsha <i>et al.</i>, (2021). "Scattering of Higher Order Mode Clusters (HOMC) from surface breaking notches in plates with application to higher temperature gradients". <i>NDT & E International</i>, 120, 102441.
International (6+2)	<ul style="list-style-type: none"> Sri Harsha <i>et al.</i>, "Experimental analysis on performance and emissions of diesel engine fueled with various blends of animal fat methyl ester". <i>Materials Today: Proceedings</i>, Volume 58, Part 1, 2022 Sri Harsha <i>et al.</i>, "Design and Simulation of Porous Ti-6Al-4V alloy structures for Additive Manufacturing of Bioimplants" in proceedings of 1st International Conference on Applied Mechanical Engineering Research 2019 (IC-AMER), NIT Warangal, INDIA. Sri Harsha <i>et al.</i>, "Interaction of Higher Order Modes Cluster (HOMC) guided waves with notch-like defects in plates" in proceedings of 43rd Review of Progress in Quantitative Nondestructive Evaluation, Atlanta, USA. Sri Harsha <i>et al.</i>, "A New EMAT Design for Generating Torsional Guided Wave Modes for Pipe Inspections" in proceedings of 43rd Review of Progress in Quantitative Nondestructive Evaluation, Atlanta, Georgia, USA. Sri Harsha <i>et al.</i>, "Guided wave simulation in plates using Split-domain FEM Approach" in proceedings of 41st Review of Progress in Quantitative Nondestructive Evaluation, Boise, Idaho, USA. Sri Harsha <i>et al.</i>, "Finite Element modeling and simulation for the development of an ultrasonic guided wave liquid level sensor" in International Simulation Conference of India 2012, IIT Bombay, INDIA. Sri Harsha <i>et al.</i>, presented a poster on "Generation of Higher Order Modes Cluster (HOMC) using Electromagnetic Acoustic Transducer (EMAT)" at ENDE 2011 - International Seminar, Chennai, INDIA. Sri Harsha <i>et al.</i>, presented a poster on "Development of SH wave EMAT for the inspection of Carbon Epoxy Composite Lap Joint" at ENDE 2011 - International Seminar, Chennai, INDIA.
National (4+2)	<ul style="list-style-type: none"> Sri Harsha <i>et al.</i>, presented a poster on "Studies on Feasibility of Ultrasonic Phased Array in Rail System" at NDE 2012 - National Seminar & Exhibition on Non-Destructive Evaluation, Chennai, INDIA. Sri Harsha <i>et al.</i>, presented a poster on "Development of SV wave Electromagnetic Acoustic Transducer (EMAT) for Weld Inspection in Stainless Steel Plate" at NDE 2012 - National Seminar & Exhibition on Non-Destructive Evaluation, Chennai, INDIA. Sri Harsha <i>et al.</i>, "Experiences with the development of an automated ultrasonic flaw detector for Indian rails" is presented at NDE 2011 - National Seminar & Exhibition on Non-Destructive Evaluation, Chennai, INDIA. Sri Harsha <i>et al.</i>, "Defect characterization using Axial Higher Order Modes Cluster (A-HOMC)" is presented at NDE 2010 - National Seminar & Exhibition on Non-Destructive Evaluation, Kolkata, INDIA. Sri Harsha <i>et al.</i>, "Study of Generation of Circumferential Guided Waves in Pipes using Meander coil EMAT" is presented at NDE 2010 - National Seminar & Exhibition on Non-Destructive Evaluation, Kolkata, INDIA. Sri Harsha <i>et al.</i>, "Guided Wave Inspection of composite Lap-Joints using Meander Coil EMAT" is presented at NDE 2010 - National Seminar & Exhibition on Non-Destructive Evaluation, Kolkata, INDIA.

CO-CURRICULAR ACTIVITIES

Seminars	<ul style="list-style-type: none"> Participated in LabVIEW Basics Training organized by National Instruments held at Chennai in 2012. Participated in Abaqus Training Seminar organized by Dassault Systèmes held at Chennai in 2009. Attended a short-term course organized by IIT Madras on "Finite Element Methods for all disciplines" held at Chennai in 2018.
Responsibilities	<ul style="list-style-type: none"> Interaction with clients to understand system level requirements, software deployment and validation, technical discussions and seminars. Presentation of work in Demos and workshops. Aiding research scholars with experimental and simulation work, writing technical papers and presentation of papers at conferences. Coordinating students for skill enhancement programs organized by SIEMENS at Andhra University.