# Faculty Profile Brief Profile (Few Paragraphs)

**Faculty Photo** 

#### **Graduated in**

Professor [P.V.Srihari] is a highly respected academic and researcher in the field of Mechanical Engineering, with extensive expertise in areas such as Mechanical Vibrations, Product Design, Theory of Machines. With over [25] years of experience in teaching and research.

Known for his/her passion for innovation and technological advancement, three research projects funded by national agencies. His work has resulted in a number of high-impact publications in reputed journals. In addition, Professor has mentored many undergraduate, postgraduate, and doctoral students, helping to cultivate the next generation of engineers and researchers.

His teaching approach combines theoretical rigor with hands-on learning, fostering critical thinking and problem-solving skills among students. With a strong commitment to academic excellence and innovation, He continues to play a pivotal role in advancing the field of mechanical engineering.

#### **Personal Information**

• Name: [Dr.P.V.Srihari]

• **Designation:** [Associate Professor]

• **Department:** [Mechanical Engineering]

Email: [sriharipv@rvce.edu.in]

• **Phone:** [080-67178144]

Google Scholar / ResearchGate / LinkedIn: [Link if applicable]/ ORCID:

https://orcid.org/0000-0001-7819-3867 Web of Science ResearcherID:P-9427-2016

## **Domain of Expertise**

#### **Research Focus**

Primary Area: [Design]

Allied Areas:

[Mechanical Vibrations]

o [Product Design]

## **Academic Qualifications**

- **Ph.D.**: [Mechanical Engineering], [JNTUA University, Anantapur], [2013]
- **M.Tech**: [Machine Design], [JNTU, Hyderabad], [1995]
- **B.Tech**: [Mechanical Engineering], [JNTU, Hyderabad], [1989]

# **Professional Experience**

Experience			
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S.No	Institute/College/Industry	Job Title	Duration (From- To)
1.	RV College of Engineering, Bengaluru	Associate Professor	Jan.2011- Till Now
2.	RV College of Engineering, Bengaluru	Assistant Professor	Aug.2006 - Dec.2010
3.	Vellore Institute of Technology, Deemed University, Vellore – 14, Tamil Nadu, India.	Assistant Professor	Dec.2001- Aug. 2006
4.	Vellore Institute of Technology, Deemed University, Vellore – 14, Tamil Nadu, India.	Senior Lecturer	July 1998 - Dec. 2001
5.	Gears India (M) Pvt. Ltd., Chennai	Design Engineer	June 1996 May 1998
6.	Sri Venkateswara College of Engineering, Sriperumbudur, T. N.	Lecturer	June 1995 June 1996

#### **Publications & Patents**

#### **Journal Publications**

- 1. P.V.Srihari, K. Ramachandra and K.Govindarajulu, Gearbox Fault Classification based on Vibration Signals using Artificial Neural Networks, International Journal of Emerging Technologies and Applications in Engineering, Technology And Sciences (IJ-ETA-ETS), Volume 2 Issue 2, June '09 Dec. '09, (137-141).
- 2. P.V.Srihari, K.Govindarajulu and K. Ramachandra, Vibration Based Gearbox Fault Detection Using Artificial Neural Networks, International Journal of Theoretical Applied Mechanics (IJTAM), Vol. 5, Number 1, 2010, (53-61).
- 3. P.V.Srihari, K.Ramachandra and K.Govindarajulu, Optimization Of Feature Selection Data For Training ANN Based Gearbox Fault Diagnosis, Technology Spectrum, Journal of Jawarlal-Nehru Technological University Hydearabd, Vol.4 No.1, March 2010,(39-41).
- 4. P.V.Srihari, K.Govindarajulu and K.Ramachandra, A Method to Improve Reliability of Gearbox Fault Detection with ANN, International Journal of Automotive & Mechanical Engineering (IJAME), Universiti Malaysia Pahang, Pahang, MALAYSIA. Vol.2, July-Dec.2010, (221-230).
- 5. Bharat Kumar.A and P.V.Srihari, A Systematic Approach to Develop a Production Standard Digital Mock-Up(DMU), Global Journal of Mechanical Engineering and Computer Science(GJMECS), Vol.1 No.3, 2011, (19-21).
- 6. P N Vinay, P V Srihari, A Mahadesh Kumar, Investigation On Structural Aspects Of Unmanned Combat Air Vehicle For Aeroelastic Analysis, International Journal of Advanced Engineering Technology, E-ISSN 0976-3945, Vol.II, Issue IV,October-December,2011,(278-283).
- 7. Prathap kairan and P.V. Srihari, Design And Development Of An Assembly Fixture For Mounting A Circlip To The Piston, International Journal of Engineering Research and Applications (IJERA), ISSN: 2248-9622, Vol. 2, Issue4, July-August 2012, (1476-1479).
- 8. K.R.Ravikumar, P.V.Srihari and G.S.Narayana, Design and Analysis of Quick Coupler for Backhoe Excavator, International Journal on Mechanical & Automobile Engineering (IJMAE), ISSN 0974-231X, special edition2012, Volume22, February 2012 March 2012.
- 9. Veena Kumari N., Srihari P. V., Ramachandra K., 3D Non-Linear Finite Element Analysis of Spur Gear, Trends in Mechanical Engineering & Technology, Vol 3, No 3 (2013), pp1-6, ISSN: 2231-1793, STM Journals.
- 10. NC Ravishankar, P V Srihari, Development and Simulation of Non-Linear Gear Dynamics Model, Journal of Aerospace Engineering and Technology Volume 3, Issue 2, JoAET (2013),pp11-16 ISSN: 2231- 038X, STM Journals.
- 11. D Jai Balaji, P V Srihari and Veeranna B Sheelvanth, Model Frequency Analysis of Automotive Exhaust System, International Journal of Mechanical Engineering and Robotics Research, 2014, ISSN 2278 ñ 0149, Vol. 3, No. 1, pp 332-337.

- 12. Karthik C., Dr.P.V.Srihari, Dr.K.Ramachandra, Optimization of Strain Gauge Location for Combined Centrifugal and Vibratory Stresses on Steam Turbine Blade, International Journal of Advance Engineering and Research Development (IJAERD) Volume 1,Issue 6,June 2014, e-ISSN: 2348 4470, print-ISSN:2348-6406, pp1-4.
- 13. Ullas D.R, Dr P.V Srihari, Offset Disc Butterfly Valve Design, International Journal of Advance Engineering and Research Development (IJAERD), Volume 1, Issue 8, August -2014, e-ISSN: 2348 4470, print-ISSN:2348-6406,pp 40-46.
- 14. Veena Kumari N, P.V Srihari, K Ramachandra, Bending Stress Analysis of Involute Helical Gear and Wildhaber-Novikov Gear, Trends in Mechanical Engineering & Technology, STM journals, Volume 4, Issue 2, 2014, ISSN: 2231-1793(online), ISSN: 2347-9965(print), pp17-21.
- 15. Madhusudhan BM, P.V. Srihari, Design and Analysis of Composite Propeller Blade for Aircraft, International Journal of Engineering Research and Applications, Vol. 4, Issue 9(Version 4), September 2014, ISSN: 2248-9622, pp.79-82.
- **16.**I.V. Manoj, P.V.Srihari, Sadanand S Kulkarni, K. Sarosh kumar, A.Bharatish, Assessment of Thermal Effects on the Levitation Speed of Bump Foil Bearings Made of Low Cost Spring Steel, Measurement, Elsevier, Volume 92, 2016, pp 453-463.
- **17.**A. Bharatish, H.N. Narasimha Murthy, B. Anand, K.N. Subramanya, M. Krishna, P.V. Srihari, Assessment of drilling characteristics of alumina coated on aluminium using CO2 laser, Measurement, Elsevier, 100 (2017), pp.164–175.
- 18. Sunita kumara, Srihari P V, Bharatish A and Narasimha Murthy H N, Parametric study to mitigate fretting fatigue in dovetail joint of aero engine compressor, Journal of Measurements in Engineering, <u>ISSN 2335-2124</u>, JVE Journals, Kaunas, Lithuania, JME, 2017, Vol. 5, Issue 1, pp. 19-28.
- 19. Arun Khot , A. Bharatish , P. V. Srihari, Effect of fretting fatigue parameters on fir-tree joint of aero-engine blade disc interface, International Journal of Novel Research And Development (IJNRD) | UGC and ISSN Approved, ISSN: 2456-4184, Volume 2 Issue 10, October-2017, pp. 10-14.
- 20. N.Balaji Ganesh and P.V.Srihari, A Review Paper on Effect of Intake Manifold Design on C.I Engine Performance and Soot Formation, International Journal of Innovative Research in Science, Engineering and Technology, ISSN(Online): 2319-8753, Vol. 6, Issue 10, October 2017, pp.19610-19614.
- 21. A. Bharatish, P. V. Srihari, Ashishkumar Panchal, H. N. Narasimhamurthy, Analysis of Fir Tree Root of Aero-engine Disc Assembly for Simultaneous Optimization of Fretting Characteristics, J. Inst. Eng. India Ser. C, Springer, 2018.
- 22. Fazila Naaz Khan, P. V. Srihari, Simulation Studies of Rattle Noise of Automobile Instrumentation Panel, Research Journal of Engineering and Technology. 9(2):April-June, 2018. ISSN 0976-2973.
- 23. Md Bilal, P. V. Srihari, M. S. Krupashankara, K. Ramachandra, Concept Development of a Dovetail Fixture to Induce Fretting Behavior, Research Journal of Engineering and Technology. 9(2):April-June, 2018, ISSN 0976-2973.
- 24. Yadhu S. Aswan, Ankit Pandey, P. V. Srihari, Comparative Study on Brake Testing Standards of Trucks and Buses, i-manager 's Journal on Mechanical Engineering, Vol. No. 3, 2018. 1-8. https://doi.org/10.26634/jme.8.3.14052

- 25. Jinka RanganayakuluEmail and P. V. Srihari, Multi-objective Optimization Using Taguchi's Loss Function-Based Principal Component Analysis in Electrochemical Discharge Machining of Micro-channels on Borosilicate Glass with Direct and Hybrid Electrolytes, Advances in Manufacturing Processes, Lecture Notes in Mechanical Engineering. Springer, Singapore, pp 349-360. https://doi.org/10.1007/978-981-13-1724-8\_34, Online ISBN 978-981-13-1724-8.
- 26. P.V.Srihari, Krishna Bhat Kainthage, Alastair A. Mascarenhas, A. Bharatish, K. Ramachandra, Fretting Fatigue Study of Dovetail Joints .with Retaining Pin, Research Journal of Engineering and Technology. 9(3): July- September, 2018, ISSN 0976-2973
- 27. P.V.Sri Hari, N.Balaji Ganesh, "Artificial Neural Networks Methodologies to Optimize Engine Performance Parameters Using MATLAB" is published in Springer Lecture notes in Mechanical Engineering-2019 Advances in Interdisciplinary Engineering Select Proceedings of FLAME 2018, https://doi.org/10.1007/978-981-13-6577-5\_2
- 28. Jinka Ranganayakulu, P.V. Srihari, "Multi-objective Optimization using Taguchi's Loss Function based Principal Component Analysis in Electrochemical Discharge Machining of Microchannels on Borosilicate Glass with Direct and Hybrid Electrolyte", Advances in Manufacturing Processes, Springer, 340-360, 2019.
- 29. Mohan Kumar T R, P V Srihari, Simulation and Optimization of Coating thickness for Absorptance and Reflectance in Multilayered Thin Films, International Journal of ChemTech Research, 2020,13(4): 364-373.
- 30. Mohan Kumar Thinakallu Ramakrishna Reddy, P. V. Srihari, Sahas, M. S. Krupashankara, Experimental studies of W-Al 2 O 3 composite thin films for solar absorptance, *Indian Journal of Physics*, 2020, *DOI:* 10.1007/s12648-020-01911-3.
- 31. Balaji Ganesh Nagisetty, Sri Hari Podala Venkata, Sequential Procedure for Improving the Efficiency of CI Engine by Using Artificial Neural Networks, International Journal of Heat and Technology, Vol. 38, No. 4, December, 2020, pp. 949-959, DOI: https://doi.org/10.18280/ijht.380422.
- 32. Jinka Ranganayakulu and P.V. Srihari, Investigations on the effect of helical tool diameter assisted with high speed rotation in electrochemical discharge machining, Int. J. Precision Technology, Vol. 10, No. 1, 2021, DOI: <a href="https://doi.org/10.1504/IJPTECH.2021.116803">https://doi.org/10.1504/IJPTECH.2021.116803</a>
- 33. MohanKumar T.R., P.V.Srihari, Sahas, Analysis of Tungsten-Alumina Nanocomposite Thin Films on SS304 Substrate, *Applied Mechanics and Materials, ISSN: 1662-7482, Vol. 903, pp 125-132, 2021 Trans Tech Publications Ltd, Switzerland.*
- **34.** Syeda Anjum, P.V Srihari, Investigation of Critical Success Factors Affecting Procure to Pay Process in Enterprise Resource Planning Systems, High Technology Letters, ISSN NO: 1006-6748, Volume 27, Issue 6, 2021, pp 680-687.
  - DOI: <a href="https://doi.org/10.37896/HTL27.6/3771">https://doi.org/10.37896/HTL27.6/3771</a>
- 35. Suprith M B and P V Srihari, Development of autonomous wiper-water based solar panel cleaning system, ISSN NO: 1006-6748, Volume 27, Issue 8, 2021, pp 468-DOI: https://doi.org/10.37896/HTL27.8/4020
- 36. Jinka Ranganayakulu, P.V. Srihari and K.Venkata Rao, An Optimization Strategy to Improve Performance in Electrochemical Discharge Machining of Borosilicate Glass Using Graph Theory Algorithm and Desirability Index, Silicon (2021). Springer Nature Journal.DOI: <a href="https://doi.org/10.1007/s12633-021-01317-8">https://doi.org/10.1007/s12633-021-01317-8</a>, 2021

- 37. Balaji Ganesh N., P. V. Sri Hari, An Experimental Investigation on Converting Conventional to Supercharged CI Engine, International Journal Of Integrated Engineering Vol.15 NO.5, pp103-122, e-ISSN: 2600-7916, DOI: <a href="https://doi.org/10.30880/ijie.2023.15.05.012">https://doi.org/10.30880/ijie.2023.15.05.012</a>, 2023
- 38. Jinka Ranganayakulu, PV Srihari, K Venkata Rao, Rithwik Shankar Raj, Mallikarjun Mahajanshetti, Machining Strategies for Micromachining of Glass Using Electrochemical Discharge Machining: A Review, Innovative Development in Micromanufacturing Processes, 132-153, CRC Press, 2024
- 39. Aditya Ramachandra Hegde, PV Srihari, A Bharatish, MB Venkat, BR Swastik Raj, Effect of Honeycomb Geometrical Parameters on Equivalent Radiated Power and Frequency Response of Motor Casing and Gearbox Surface of a Powertrain, Applied Research, <a href="https://doi.org/10.1002/appl.202400060">https://doi.org/10.1002/appl.202400060</a>

#### **Conference Papers**

- 1. P.V.Srihari and K.Annamalai, Some precautions in FEA, MINAC-2000, Advanced Trends in Mechanical Research and Development, JNTU College of Engineering, Anantapur, Andhra Pradesh, June 2000.
- 2. P.V.Srihari and K.Annamalai and B.V.A. Rao, A view on latest Technologies in Acoustics, NSA 2003, National Symposium on Acoustics (Journal of Acoustic Society of India, Vol. 29, 2001), pp 251-256, 2001.
- 3. P.V.Srihari and K.Annamalai, Coupled Acoustic Analysis of a Submerged Steel Ring" NSA 2001, National Symposium on Acoustics (Journal of Acoustic Society of India, Vol. 29, 2001), pp 133-137, 2001.
- 4. P.V.Srihari and B.V.A. Rao and K.Chandrasekharan, A study on Improving Gear Efficiency by enhancing the fatigue strength of gear materials, National Symposium of Research Scholars (NSRS-4), IITM, Chennai, September 2002.
- 5. P.V.Srihari and B.V.A. Rao, Noise and Vibration Monitoring of Gearboxes, NSA 2003, National Symposium on Acoustics (Journal of Acoustic Society of India, Vol. 29, 2001), ARAI, Pune, October 2003.
- 6. P.V.Srihari, K.Annamalai , Normal Mode Dynamic Analysis of Turbo Charger Impeller, National Conference on Recent trends in Manufacturing Modeling and Analysis(MMA 2004) , St. Joseph's College of Engineering, Chennai, 2-3 February 2004.
- 7. P.V.Srihari, K.Annamalai, K.V.Manikandan, T.C. Kanish, Development of Health Monitoring Program for Gearboxes using Artificial Neural Networks, National Conference on World Class Manufacturing -2004 organized by B.D. COLLEGE OF ENGINEERING, Sevagram, Wardha-442102, 26<sup>th</sup> March 2004.

- 8. P.V.Srihari, K.Govindaraju, C.Ramprasadh, S.Prem, Condition Monitoring And Control For Improving The Effectiveness Of An IC Engine, National Conference on World Class Manufacturing -2004 organized by B.D. College of Engineering, sevagram, Wardha-442102, 26<sup>th</sup> March 2004.
- 9. Srihari, P.V., Anand, K, Modeling of Parameters Affecting Gearbox Vibrations for Fault Diagnosis, AIMTDR21, Vellore Institute of Technology, Vellore, 20-22 December 2004.
- 10. P.V.Srihari, Rajesh and Dinesh, New Design optimization of Directional Control valve in Tractor Lift Assembly, National conference on E-factory: Technology & Challenges, Institute of Road and Transport Technology, Erode, Tamilnadu, 24-25 <sup>th</sup> Aug.2007.
- 11. P.V.Srihari and Khadersab.A, Simulation of Welding to study Residual Stress and Distortions, National Conference on Advances and contemporaries in Mechanical Engineering, Erode Sengunthar Engineering College, Erode, Tamilnadu, 7-8 <sup>th</sup> February 2008.
- 12. Vineeth kumar S. R., P. Subba Rao and P. V. Srihari, Design and Analysis of Interface Joint of a Large Telescope to Satellite Structure, International Conference on Advances in Mechanical Engineering 2008, SVNIT, Surat, 15-17, December, 2008.
- 13. Shashikiran.T, P.V Viswanath and P.V Srihari, Implementation of Windchill Product Life Cycle Management (PLM) Technology in Aircraft Industry A Case Study, International Conference on Advances in Mechanical Engineering 2008, SVNIT Surat, 15-17, December, 2008.
- 14. P.V.Srihari, K.Govindarajulu and K.Ramachandra, Optimization of Vibration Data to improve Gear Fault Diagnosis, International Conference on Convergence of Science & Enginnering (ICSE-2010), Dayananda Sagar College of Engineering, Bangalore, 21-22 April 2010.
- 15. P.V.Srihari, K.Govindarajulu and K.Ramachandra, Fault Diagnosis of Gearboxes, National Conference on New Trends in Mechanical Sciences (NTMS 2010), Dr.Navalar Nedunchezhiyan College of Engineering, Tholudur 606 303, Cuddalore, TN. 12<sup>th</sup> & 13<sup>th</sup> April, 2010.
- 16. P.V.Srihari, K.Govindarajulu and K.Ramachandra, Optimization of Feature Selection Data for Training ANN based Gearbox Fault Diagnosis, National Conference on Emerging Trends in Industrial Automation (ETIA-2010), Velammal Engineering College, Chennai, 29<sup>th</sup> March 2010.
- 17. P.V.Srihari, K.Govindarajulu and K.Ramachandra, Vibration Monitoring of Gear Boxes, National Conference on Approaching Scholastic Horizons in Mechanical Engineering (NCASHME2010), Shirdi Sai Engineering College, Bangalore, 23-24 April 2010.
- 18. Kotresha.M, Srihari.P.V., Ramachandra. K., Fretting Fatigue of Aero-Engine Dovetail Roots Using Contact Analysis, International Conference on Computer Aided Engineering (CAE-2013) at Indian Institute of Technology Madras, Chennai, India, pp93-98, Dec.19-21, 2013.

- 19. P.V.Srihari, Karthik. C, K.Ramachandra, Veeresh. H.B. and Vijay Mahesh kugli, Optimization of strain gauge location for combined centrifugal and vibratory stresses on steam turbine blade, NAFEMS INDIA Regional Conference 2015, Chennai, 8 Feb. '15.
- 20. Rajkumar Tondare, Ashishkumar Panchal and P.V.Srihari, Influence of stiffner & material on the cylindrical shaped UWV- A review, All India Seminar: Mini- Under Water Vehicles, IEI-KSC, NDRF, Bangalore, 11-12 March 2015.
- 21. Malatesh S. Kalal, Prasad F. Patil and P.V.Srihari, A system for water quality monitoring using AUV, All India Seminar: Mini- Under Water Vehicles, IEI-KSC, NDRF, Bangalore, 11-12 March 2015.
- 22. Vinayak Kammmar K. and P.V.Srihari, Fuel Cell Power System for UWV, All India Seminar: Mini- Under Water Vehicles, IEI-KSC, NDRF, Bangalore, 11-12 March 2015.
- 23. Jinka Ranganayakulu, P.V.Srihari, P. Rayudu and Subhash R. Patil, Various Tool Feed Mechanisms in Electrochemical Discharge Machining: A Review, 3<sup>rd</sup> National Conference on Innovations in Mechanical Engineering, MITS, Madanaplle, 2016, pp. 300-302, ISBN: 978-93-85100-53-6.
- 24. Sabeha, P.V.Srihari, K. Ramachandra, Design and development of Aqua Quad Copter, International Conference on Aeronautics Astronautics & Aviation [ICAAA 2018], Dhanalakshmi Srinivasan College of Engineering in association with Universiti Putra Malaysia, 23 & 24 March 2018.
- 25. Yadhu S Aswan, Srihari.P.V, Shivdayal Prasad, Development of a Computer Aided Performance Prediction Model for Hydraulic Brake System, Proceeding for International Conference on Civil and Mechanical Engineering(ICCME-18), Trivandrum, June'18, pp 46 52.
- 26. Jinka Ranganayakulu and P.V. Srihari, Multi-objective optimization using Taguchi's loss function based principal component analysis in ECDM of micro-channels on borosilicate glass with direct and hybrid electrolytes, International conference on Engineering materials and manufacturing (ICEMMM2018), SSN college of Engineering, Chennai. 15-16, Feb.2018
- 27. N.Balaji Ganesh and P.V.Srihari "Artificial Neural Network Methodologies to optimize Engine Performance Parameters using MATLAB" Is Presented at 1st International conference on 'Future Learning Aspects of Mechanical Engineering' (FLAME 2018) held on 3rd 5th October 2018 at Amity University, Uttar Pradesh
- 28. N.Balaji Ganesh and P.V.Srihari "Comparison of C.I Engine Performance Parameters and Emissions by Varying Designs of Intake Manifolds" Is Presented at International Conference on Intelligent Manufacturing and Energy Sustainability (ICIMES 2019) held on 21st 22nd june 2019 at MRCET, Hyderabad
- 29. An Approach for Designing Ultrasonic Dental Scaler National Conference on Emerging Trends in Materials, Design and Manufacturing, (NCMDM 2019), May 17 -18, 2019.

#### **Books/Book Chapters**

1. [Author(s)], [Book Title], [Publisher], [Year].

#### Patents [Filed / Published / Granted]

1. [Patent Title], [Patent No.], [Year].

## **R & D Grants & Consultancy Projects**

#### **Ongoing & Completed Research Projects**

 Development of a novel ultrasonic dental scaler tip using duplex treatment of laser surface texturing and titanium based ceramic coatings for efficient tartar removal" - BIRAC, 2023-25, Co-PI

## **Ongoing & Completed Consultancy Projects**

## **Professional Memberships**

MISTE, MIE

## **Awards & Recognitions**

#### **Student Supervision**

• Ph.D. Candidates: [04] ([02] Graduated)

• **M.Tech:** [60]

• Undergraduate Research Mentees: [50]

#### **Professional Roles**

## **Teaching**

#### **Core Courses: [Current semester]**

- ME243AT- Theory of Machines
- ME122GL Computer Aided Engineering Graphics

#### **Advanced/Lab Courses:**

- ME362IA-DESIGN OF MACHINE ELEMENTS II Lab
- ME245AI MANUFACTURING TECHNOLOGY Lab.

• ME244AI - FLUID MECHANICS Lab.

## **Professional Roles**

# Responsibilities

• Academic: [Program Co-ordinator]

## **External Connect**