

Curriculum Vitae

Name	Dr. Shivashankar R. Srivatsa
Office Address	Assistant Professor Department of Mechanical Engineering B. M. S. College of Engineering Bull Temple Road Bengaluru 560 019.
E-mail	shivashankarsrivatsa.mech@bmsce.ac.in
Personal Web page	srsmech.wordpress.com
Google Scholar page	https://scholar.google.co.in/citations?user=oLwCge8AAAAJ&hl=en

Education

<i>Degree</i>	<i>Year</i>	<i>University</i>	<i>College</i>	<i>Class Obtained</i>
Ph. D. (Mechanical Engineering Sciences)	2016	Visvesvaraya Technological University	East Point College of Engineering & Technology, Bangalore	-
M. Tech. (Machine Design)	2001	Visvesvaraya Technological University	B. M. S. College of Engineering, Bangalore	First Class with Distinction
B.E. (Mechanical Engineering)	1997	Bangalore University	Bangalore Institute of Technology, Bangalore	First Class with Distinction

Experience

Teaching: 21 Years

Research: 3 Years

<i>From</i>	<i>To</i>	<i>Designation</i>	<i>Institution</i>	<i>Courses taught</i>
August 2014	Till date	Assistant Professor	B. M. S. College of Engineering, Bull Temple Road, Bengaluru	Post-Graduate & Undergraduate
January 2013	July 2014	Associate Professor	Dayananda Sagar College of Engineering, Kumaraswamy Layout, Bengaluru	Post-Graduate & Undergraduate
August 2007	December 2012	Assistant Professor		
April 2004	July 2007	Assistant Professor	A. P. S. College of Engineering, Kanakapura Road, Bengaluru	Undergraduate
September 1998	March 2004	Lecturer		

Research

Analysis of Composite Structures 2009 – 2011	Title of R & D Project: Investigation of Impact Damage Tolerance of Composites for Naval structures/components Co-Investigator, R & D Project funded by Naval Research Board Research Grant: 21 Lakhs
Computational Fracture Mechanics	Title of Ph.D. Thesis: Membrane and Bending Stress Intensity Factors for Arbitrarily Oriented Cracks in Complex Shell Structures
Presently guiding two Research Scholars for Ph.D.	1. Impact Damage tolerance of Composite Structures and components 2. Fracture Mechanics Analysis and Structural Integrity Assessment of pressure tubes

Book Published H V Lakshminarayana, S R Srivatsa , Finite Element Modelling for Engineering Analysis, 1e, Yes Dee Publishing Pvt. Ltd., Chennai, Paperback, 512 pages, 2017, ISBN:9789380381534.

Fields of Interest: Machine Design, Finite Element Analysis, Computer Aided Engineering, Computational Fracture Mechanics, Composite Structural Analysis

Courses Taught

<i>Undergraduate</i>	<i>Post-Graduate</i>
Finite Element Method Mechanics of Materials Theory of Elasticity Design of Machine Elements Computer Aided Engineering Drawing Computer Aided Machine Drawing Elements of Mechanical Engineering Operations Research Control Engineering Tribology & Bearing Design	Finite Element Method Computer Graphics Composite Materials Technology Theory of Plasticity Computer Aided Design Finite Element Modeling Theory of Elasticity Computational Methods in Engineering analysis Finite Element Analysis for Manufacturing Simulation Laboratory

Publications

• International Journals

1. Shivashankar R. Srivatsa, H L Vinayaka, Damage Tolerance Assessment of Laminated Composite Plates Subjected to Ballistic Impact, In: Advances in Structural Integrity, Prakash R., Jayaram V., Saxena A. (eds), 1, 2018, Springer, Singapore, 183-194.
2. Vinod L. Hattalli, Shivashankar R. Srivatsa, Wing Morphing to Improve Control Performance of an Aircraft - An Overview and a Case Study, Materials Today: Proceedings 5 (10), 2018, Elsevier, 21442–21451
3. Vijay Badadani, T S Sriranga, and Shivashankar R Srivatsa, Analysis of Uncertainty in Digital Image Correlation Technique for Strain Measurement, Materials Today: Proceedings 5 (10), 2018, Elsevier, 20912-20919.
4. Vinod L. Hattalli, Shivashankar R. Srivatsa, Sheet Metal Forming Processes – Recent Technological Advances, Materials Today: Proceedings 5 (1), 2018, Elsevier, 2564-2574.
5. Sharath B N, J Sharana Basavaraja, Shivashankar R Srivatsa, Effect of Orientation of Semi-elliptical crack in a turbine blade on Stress Intensity Factor, ISME Journal of Mechanics and Design, 1(2), 2018, pp 1-10.
6. Shivashankar R. Srivatsa, H. V. Lakshminarayana, Stress Intensity Factors for Arbitrarily Located and Oriented Cracks in a Cylindrical Shell with Tori-Spherical End Closures subjected to Internal Pressure, International Journal of Engineering Research & Applications, 2(3), 2012, pp 3057-3071.
7. L. J. Kirthan, H. V. Lakshminarayana, R. S. Shivashankar, Calibration of a Test Method to Measure Mode I, Mode II, and Mode III Fracture Toughness of Engineering Materials, Journal of Aerospace Science & Technologies, 64(2), May 2012, pp 132 – 142. (ISSN: 0972-950X)

• Conferences

1. Sharath B N, J Sharana Basavaraja, Shivashankar R Srivatsa, Effect of Orientation of Semi-elliptical crack in a turbine blade on Stress Intensity Factor, Proc. 1st International and 18th ISME Conference ISME-18, NIT Warrangal, 2018.

2. Vinod L. Hattalli, Shivashankar R. Srivatsa, Sheet Metal Forming Processes – Recent Technological Advances, Proc. Int. Conf. Advanced Materials & Applications, ICAMA-2016, BMS College of Engineering, Bengaluru, 15-17 June 2016.
3. Vijay Badadani, T S Sriranga, and Shivashankar R Srivatsa, Analysis of Uncertainty in Digital Image Correlation Technique for Strain Measurement, Proc. International Conference on Smart Engineering Materials, R. V. College of Engineering, 2016.
4. Ajay Krishna V S, Suman Das D, Shivashankar R Srivatsa, H V Lakshminarayana, Mixed-Mode Fracture of Nuclear Reactor Steam Generator Helical Coil tube with Arbitrarily Oriented Cracks Subjected to Internal Pressure, Proc. Nat. Conf. Advances in Mechanical Engineering and Applied Sciences AMEAS-2016, Dayananda Sagar College of Engineering, Bangalore, Feb 19-20, 2016, ISBN: 978-93-84935-77-1.
5. Gurusharan, Shivashankar R. Srivatsa, Ajay Krishna and Narendra Viswanath, Stress Intensity Factors for Axial Through Wall Crack in a Cylindrical Shell with Tori-spherical end closures, Proc. International Conference on Modern, Intelligent and Green Manufacturing, ICMIGM-2015, December 11 - 12, 2015, Tamil Nadu, India, pp397-402.
6. Shivashankar R. Srivatsa, Jyothi D R, Lakshminarayana H V, Blended Engineering Curriculum for Better employability of Students, Proc. Int. Conf. on Transformations in Engineering Education, ICTIEE-2015, BMS College of Engineering, Bengaluru, 7-9 January 2015.
7. Vinayaka H L, Shivashankar R Srivatsa, Lakshminarayana H V, Investigation of Ballistic Impact on Composite Stiffened Panel, Journal of Mechanical Engineering Research and Technology, 2(1), 2014, pp 216-222.
8. Impact Damage in Composite Structures: Prediction and Verification, Proc. Int. Conf. Convergence of Science, Engineering & Management in Education & Research, Dayananda Sagar College of Engineering, Bangalore, June 2013.
9. Nonlinear Finite Element Analysis: Contact Nonlinearity, Proc. Int. Conf. Convergence of Science, Engineering & Management in Education & Research, ICCSEM-2013, Dayananda Sagar College of Engineering, Bangalore, June 2013.
10. Studies on Ballistic Impact of Ceramic Coated Composite for Armour Protection, Proc. Int. Conf. Convergence of Science, Engineering & Management in Education & Research, ICCSEM-2013, Dayananda Sagar College of Engineering, Bangalore, June 2013.
11. Active Vibration Control of Flexible Plate structure, Proc. Int. Conf. on Convergence of Science, Engineering & Management in Education & Research, ICCSEM-2013, Dayananda Sagar College of Engineering, Bangalore, June 2013.
12. A DOE based Optimization of Vehicle front end structure considering Occupant safety, Nat. Conf. Emerging Trends in Engg. & Technologies, ETET-2013, Jyothy Institute of Technology, Bangalore, March 2013.
13. Energy Release Rate Evaluation of Bi-material Interface Cracks, Nat. Symposium on Recent Trends in Mechanical Engineering, 31 October 2012, Shridevi Institute of Engg. & Tech., Tumkur.
14. Three-dimensional Analysis of Chevron notched Fractured Specimen through Computational Fracture Mechanics, Proc. Int. Conf. Challenges & Opportunities in Mech. Engg., Ind. Engg. and Mgmt. Studies, Vol.1, July 2012, pp 27 - 31. (ISBN: 978-93-82338-03-1)
15. Finite Element Modeling for Elastic-Plastic Stress Analysis: Development, Validation and Case Study, Proc. Int. Conf. Challenges & Opportunities in Mech. Engg., Ind. Engg. and Mgmt. Studies, Vol.1, July 2012, pp 188 - 192. (ISBN: 978-93-82338-03-1)
16. Transient Thermal-Structural Analysis of an Automobile Brake Drum, Proc. National Conference on Emerging Trends in Mechanical Engineering, ETME-12, Rajarajeshwari College of Engineering, Bangalore, February 2012.
17. Finite Element Modelling for Coupled Field Analysis of Piezoelectric Fields, 2011 ANSYS Academic Users' Conference, ANSYS Inc., Bangalore, October 2011.
18. Finite Element Modelling for Impact Analysis of Composite Laminates and Structures, Joint Int. Conf. on Advanced Materials, ICAM-2011, B.T.L. Institute of Technology, Bangalore, 19-20 August 2011.

19. Impact Damage Resistance of Composite Laminates and Curved Panels, Joint Int. Conf. on Advanced Materials, ICAM-2011, B.T.L. Institute of Technology, Bangalore, 19-20 August 2011.
20. Finite Element Modeling for Impact Analysis of Laminated Composite Structures, Proc. Nat. Conf. Developments in Composite Materials and Processes, DCMP-2011, Don Bosco Institute of Technology, Bangalore, 7-9 April 2011, p267.
21. Impact Damage Resistance of Composite Laminates & Structures: Prediction & Verification, National Seminar & Exhibition on Polymeric Materials in Defence, POMADE-2011, Naval Materials Research Laboratory, DRDO, Ambernath, 4-5 February 2011.
22. Determination Of Mixed Mode Stress Intensity Factors For Arbitrary Cracks In Conical Shell Structures, Proc. Int. Conf. Convergence of Science & Engineering in the New Millenium, ICSE2010, Dayananda Sagar College of Engineering, Bangalore, April 2010.
23. Refined Finite Element Models to Determine Mixed Mode Stress Intensity Factors for Surface Crack Problems, Proc. Int. Conf. Advances in Mechanical & Building sciences in the 3rd Millenium, ICAMB 2009, VIT University, Vellore, December 2009.
24. Finite Element Modeling For Structural Integrity Assessment Of Automobile Drive Shaft, Int. Conf. and Exhibition on Total Engineering, Analysis & Manufacturing Technologies, TEAMTECH-2009, Jnana Jyothi Auditorium, Bangalore, November 2009.
25. Finite Element Models for Simulation of Metal Casting Processes, Proc. National Engineering Conference NEC-2009, Dayananda Sagar College of Engineering, Bangalore, March 2009.
26. Finite Element Models for Fracture Mechanics Analysis of Complex Shell Structures, Int. Conf. and Exhibition on Total Engineering, Analysis & Manufacturing Technologies, TEAMTECH-2008, Indian Institute of Science, Bangalore, September 2008.
27. Computers Applications in Manufacturing Engineering, International Symposium on Advanced Materials and Processes, Basaveshwar Engineering College, Bagalkot, October 2007.
28. Past, Present and Future Applications of Thermal Spray Coatings in Composites, Proc. Nat. Conf. Recent Trends in Material Science & Technology, Vellore Institute of Technology, Vellore, Tamil Nadu, August 2005.

Expert Lectures delivered

<i>Title of Lecture / Expert Talk</i>	<i>Programme</i>	<i>Date / Year</i>
Engineering Curriculum for the Millennials: A formal and non-formal perspective	International Webinar, Indo Universal Collaboration for Engineering Education, IUCEE Webinar Series	9 th October 2019
Digital Image Correlation: Theory and Engineering Applications	ISTE Sponsored One-week Faculty Development Programme on Contact and Non-contact Measurements	July 2019
1. Computer Aided Design 2. Geometric Modeling and GD & T	One-week Skill Development Programme on Advanced Manufacturing Techniques, B. M. S. College of Engineering	July 2019
1. FE Modeling for Engineering Analysis 2. 3D Modeling of Sections 3. Finite Element Analysis of Beams 4. Finite Element Analysis using 1D elements	One-week training programme on 'CAD Modeling, ANSYS and MATLAB', FET-Rohilkhand University, Bareilly, Uttar Pradesh.	August 2018
Fracture Mechanics – Theory and Computations	One-week FDP on 'Theoretical and Computational Mechanics-II', NMAM Institute of Technology, Nitte	July 2018
Finite Element formulation of Dynamic and Axi-symmetric problems	One-day FDP on 'Finite Element formulation', RNS Institute of Technology, Bengaluru	February 2018

Finite Element Analysis using Beam elements – Theory and Laboratory problems	One-week STTP on 'Finite Element Analysis & Simulation' for faculty of Polytechnic, BMS College of Engineering	January 2018
Finite Element Modeling for Engineering Analysis	ISTE Sponsored Two-week STTP on 'Advances in Finite Element Method and Applications', BMS College of Engineering	July 2017
Keynote address: 'Engineering Analysis using FEM'	3-day Workshop on 'FEM for Engineers', RNS Institute of Technology, Bengaluru	January 2017
Finite Element Analysis and Applications', Lecture + Laboratory training	One-week FDP on Modeling, Materials & Manufacturing, BMS College of Engineering	December 2016
Computational Fracture Mechanics	Two-week FDP on Fatigue and Fracture, BMS College of Engineering	July 2016
Delivered series of nine Live Lectures in the subject Finite Element Method	Subject Expert, VTU-EDUSAT Programme-20:, Visvesvaraya Technological University, Bengaluru	April – June 2016
1. Hands-on training exercises in Design Laboratory 2. Hands-on training exercises in Finite Element Analysis Laboratory	Resource Person: Two-week Skill Development Programme for Non-teaching staff, Sponsored by TEQIP, BMS College of Engineering	June 2015
Computational Fracture Mechanics: Stress Intensity Factors for Cracks in Shell Structures	Invited Lecture, Workshop on Advances in Fatigue & Fracture, R. V. College of Engineering, Bangalore	18-19 October 2012
Computer Aided Machine Drawing	Guest Lecture, Department of Automobile Engineering, Dayananda Sagar College of Engineering, Bangalore	7 March 2012
Computer Aided Process Drawing for Chemical Engineers	Department of Chemical Engineering, Dayananda Sagar College of Engineering, Bengaluru	2011
Finite Element Method for Heat Transfer Analysis	Faculty Development Programme on Finite Element Method for Engineering Analysis, Bangalore Institute of Technology, Bangalore	28 January 2009
Thermal Analysis by FEM: Computational Heat Transfer	NAFEMS (India) Workshop on Finite Element Modeling for Engineering Analysis, Indian Institute of Science, Bangalore	24 September 2008
Finite Element Modeling for Computational Heat Transfer	AICTE – ISTE Short Term Training Programme, Developments in the FEM Applications in Mechanical Engg., Sri Bhagawan Mahaveer Jain College of Engineering, Bangalore	3rd July 2008
Computer Graphics	Guest Faculty, Center for PG-Studies, Department of Mechanical Engineering, B.M.S. College of Engineering, Bangalore	October 2007 – January 2008

FDP / Training programmes Conducted

<i>Programme</i>	<i>Date / Year</i>	<i>Role</i>
ISTE Sponsored One-week Faculty Development Programme on Contact and Non-contact Measurements	July 2019	Coordinator & Resource Person
One-week training programme on 'CAD Modeling, ANSYS and MATLAB', FET-Rohilkhand University, Bareilly, Uttar Pradesh, under TEQIP-III	August 2018	Coordinator & Subject Expert
One-week STTP on 'Finite Element Analysis & Simulation' for faculty of Polytechnic, BMS College of Engineering, under TEQIP-III	January 2018	Coordinator & Resource Person
ISTE Sponsored Two-week STTP on 'Advances in Finite Element Method and Applications', BMS College of Engineering	July 2017	Coordinator & Resource Person
VTU Sponsored 3-day Workshop on 'FEM for Engineers', RNS Institute of Technology, Bengaluru	January 2017	Subject Expert and Keynote Speaker
Two-week FDP on Fatigue and Fracture, BMS College of Engineering, under TEQIP-II	July 2016.	Coordinator
VTU-EDUSAT Programme-20;, Course: Finite Element Method Visvesvaraya Technological University, Bengaluru	April – June 2016	Subject Expert
Interactive Workshop on Computer Aided Machine Drawing, Dayananda Sagar College of Engineering	December 2012	Resource Person
One-day Workshop on Computer Aided Machine Drawing, A. P. S. College of Engineering, Bangalore	27 Feb 2012	Trainer
Workshop on Computer Aided Chemical Process Drawing for Faculty of Chemical Engineering, Dayananda Sagar College of Engineering	20-22 July 2011	Resource Person and Trainer
Refresher Course on Computer Aided Engineering Drawing, Department of Mechanical Engineering, Dayananda Sagar College of Engineering, Bangalore	27 Aug - 3 Sep 2010	Resource Person
Faculty Development Programme on Computer Aided Engineering Drawing, Department of Mechanical Engineering, Dayananda Sagar College of Engineering	5-6 February 2009	Resource Person
Faculty Development Programme on Finite Element Method for Engineering Analysis, Bangalore Institute of Technology, Bangalore	27-31 January 2009	Resource Person & Co-organizer
Two-day Workshop on Computer Aided Machine Drawing, Dayananda Sagar College of Engineering, Bangalore	September 2008	Trainer

FDP / Training programmes Attended

<i>Date</i>	<i>Duration</i>	<i>Particulars</i>	<i>Organisers</i>
29 July – 10 August 2019	2-week	Faculty Development Programme on Mechatronics and Artificial Intelligence	TEQIP-III B. M. S. College of Engineering
22 – 27 July 019	1-week	Faculty Development Programme on Contact and Non-contact Measurements	Sponsored by ISTE, B. M. S. College of Engineering
6 – 8 October 2017	3-day	Workshop Series on 'Advanced Composite Materials, Fatigue & Fracture Testing of Metals'	Sponsored by INSIS MSR University of Applied Sciences, Bengaluru

17 – 28 July 2017	2-week	Short Term Training Programme on 'Advances in Finite Element Method and Applications'	Sponsored by ISTE B. M. S. College of Engineering, Bengaluru
12 – 17 September 2016	1-week	Short Term Course on 'Digital Optical Measurements: Digital Photoelasticity and Digital Image Correlation'	Sponsored by AICTE Department of Applied Mechanics, Indian Institute of Technology – Madras, Chennai
8 – 12 August 2016	1-week	Faculty Development Programme on Computer Aided Machine Drawing with SolidWorks and GD&T	TEQIP B. M. S. College of Engineering, Bengaluru
25 th July to 5 th August 2016	2-week	Faculty Development Programme on Fatigue and Fracture, BMSCE, July 2016	TEQIP B. M. S. College of Engineering, Bengaluru
2 nd May to 10 th July 2016	4-week	10-week MOOC course: Equivalent to 4-week Faculty Development Programme on Use of ICT in Online and Blended Learning (MOOC course)	Ministry of HRD NMEICT, and Indian Institute of Technology-Bombay
15 June 2016	1-day	Training on COMSOL for Teaching & Research	COMSOL India
23-27 May 2016	1-week	Technology Transfer and FDP on Non-Traditional Machining & Material Characterisation	Centre of Excellence for Advanced Materials Research, BMSCE
29-30 March 2016	2-day	Training programme on Altair-Hypermesh	Altair India Pvt. Ltd.
2 nd June 2015	1-day	Seminar on Fracture Mechanics and Remaining Life Assessment	Pro-SIM R & D Pvt. Ltd.
23-27 February 2015	1-week	Faculty Development Programme on ANSYS Solutions for Mechanical Engineering Problems	K S Institute of Technology, Bangalore
4-6 January 2015	3-day	Pre Conference Workshops and Int. Conf. on Transformations in Engineering Education ICTIEE-2015	Indo-US Collaboration for Engineering Education & BMSCE

Additional responsibilities at College / University level

Significant Contribution to NBA Accreditation, PG-Machine Design Program
 PG Coordinator – Machine Design, Coordinator – PG Placement & feedback
 Event Coordinator – Phase Shift 2017, Department Coordinator – Phase Shift 2018
 Faculty Coordinator – MEA, Department Coordinator-Newsletter
 Member-BOE (Mechanical) 2018-2019

Paper Setter (BE / M.Tech.), Examiner – Theory & Practical (BE / M.Tech.),
 Member – Question Paper Audit
 Squad member, Deputy Chief Superintendent
 Examiner – M.Tech. Project Work, Internship

Member, BOE(PG-Machine Design), N. M. A. M. Institute of Technology, Nitte, 2018-19, 2019-20

Coordinator, Deputy Chief Coordinator, Central Valuation, VTU, 2010 - 2013

Member, Board of Examinations, Karnataka State Open University, Mysore, Jan-June 2011

Sponsored Research Projects

<i>Title of Project Proposal</i>	<i>Funding Agency</i>	<i>Role</i>	<i>Status</i>
Investigation of Impact Damage Tolerance of Composites for Naval Structures / Components	Naval Research Board, DRDO Research Grant: Rs.21 Lakh	Co-Investigator	Completed

Project Guidance	<i>Under Graduate (B. E.)</i>	<i>Post Graduate (M. Tech.)</i>	<i>Research (Ph. D.)</i>
Completed	15	27	-
Under progress	1	4	2

Professional Membership

- Life Member, Indian Society for Technical Education (ISTE)
- Life Member, Indian Structural Integrity Society (INSIS)
- Life Member, Indian Society of Systems for Science & Engineering (ISSE)

Honors

- Second Rank in M.Tech. (Machine Design), Visvesvaraya Technological University, 2001
- Holder of Government of India National Merit Scholarship, 1991-1997