Dr. B. Janarthanan

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Address for Communication

Lakshmi Apartments

Flat: F, Plot No.4, 3rd Street, Balamurugan Nagar, Velachery

Chennai – 600 042, India

Objective

I am seeking to obtain a responsible position where I can apply my skills, knowledge and experience and can maximize my skills through continuous learning while at work. I firmly believe in the principle of implementing my duties with sincerity, honesty, dedication and determination.

Education

Program	Subjects	Year of	Institution/	CGPA/
		completion	University	Percentage
Ph.D	Machine Design	2012	IIT Madras	8.18 (CGPA)
(Full time)	(Mechanical Engg.)			
M.Tech.	Engineering	2001	IIT Madras	8.70 (CGPA)
(Full time under	Mechanics			,
QIP)				
B.E.	Mechanical	1992	University of Madras	72.32 (%)
(Full time)	Engineering		(Sathyabama Engg. College)	First Class
XII Std.	Maths., Phys.,	1988	Tamilnadu Board	79.75 (%)
	Chem., Statistics			
X Std.	Maths., Science	1986	Tamilnadu Board	85.20 (%)
PGDEMA	PG diploma	expected to	IGNOU	Pursuing
(Distance mode)	Educational Management and Administration	complete by Dec. 2019		

Scholastic Achievements

- Scholarship from MHRD, Govt. of India for pursuing Ph. D at IIT Madras
- Secured 2nd rank in college during undergraduate B.E. (Mechanical)
- Secured 1st rank in the school in X standard
- Received national level scholarship for rural students in VIII std. at school (for 4 years from IX std. to XII std.)

Work Experience

1. Mohamed Sathak A J College of Engineering, Siruseri, Chennai-603103

Position: Professor, Department of Mechanical Engineering

Period: From 27.12.2019 to till now

2. Saveetha Engineering College, Thandalam, Chennai – 602105 Position: Professor, Department of Mechanical Engineering

Period: From 19.07.2019 to 24.12.2019

3. Misrimal Navajee Munoth Jain Engineering College, Thoraipakkam, Chennai - 600 097

Position: Professor, Department of Mechanical Engineering

Period: from 16.06.2015 to 24.05.2019

• Responsible for preparation of SAR for NBA and got accreditation for 3 years

- Responsible for R&D development in the college and held the position of Head (R&D)
- Coordinator for ICT Academy
- Teaching both UG and PG courses for B.E.(Mech.) and M.E.(Engg. Design)
- Responsible for all developmental works in the department
- Responsible for organizing national level conference
- Responsible for organising faculty development and training programmes in the department
- 4. Sree Sastha Institute of Engineering & Technology, Chembarambakkam, Chennai 600123

Position: Professor and Head, Department of Automobile Engineering for three years

: Principal i/c for one full academic year

Period: 25.06.2012 to till 15.06.2015

- Principal i/c from 01.06.2014 to 25.04.2015
- Responsible for all developmental works in the department
- Chief Superintendent of all examinations in the college
- Management Representative (MR) for ISO (audit completed successfully)
- Responsible for preparation of SAR for NBA & NAAC (accredited successfully by NAAC)
- Attended training program for NBA (SAR preparation)
- Motivated students to participate successfully in SAE-BAJA national level competition held at Pithambur, MP
- Motivated students for SAE Go-Kart national level event held at LPU, Punjab and had been placed in 5th place in preliminary design competition
- Prepared students for SAE-INDIAEFFI-Cycle competition
- Prepared students for SAE-INDIA SUPRA competition
- Organized technical symposium ATMAVAHA-13
- Courses teaching: Design of Machine Elements, Finite Element Analysis, Vehicle Dynamics, Engineering mechanics and Engineering Graphics
- 5. Jaya Engineering College, Thirunindravur- 602024 (Near Chennai)

Professor & Director, Department of Mechanical Engineering

Period : Sep.2011 to May 2012

- Responsible for all administrative works within dept and reporting directly to the secretary
- Responsible for AICTE-NBA
- Professor & Head for P.G. course M.E. (CAD/CAM)
- Taught P.G. courses M.E. (CAD) and U.G. 1st year Engineering Graphics

- Coordinator for Engineering Graphics course and produced 100 % as individual result and 93 % (overall) pass results in all 9 U.G. branches of 1st year as coordinator
- Responsible for file maintenance and lab maintenance

6. Sri Ram Engineering College, Perumalpattu-602024 (near Chennai) Professor & Head, Department of Automobile Engineering (Dec.2010 to Aug.2011)

- Responsible for overall development of lab facilities
- Responsible for all administrative works within the dept and reporting directly to principal
- Acted as principal in-charge on many occasions
- Taught a course on Strength of Materials and Vehicle Dynamics
- Faculty advisor for SAE

7. Indian Institute of Technology-Madras Research Scholar (Full time) at Machine Design Section (August 2005 to Dec. 2010)

- Completed consultancy project titled "Technical study of vehicle dynamics of Main Battle Tank" from CVRDE (DRDO), Avadi, Chennai-600054 under my guides supervision
- Completed consultancy project titled "Mathematical modeling of powertrain dynamics of tracked vehicle" from Simulator Development Division (SDD), Army Technology Board (ATB), Secunderabad-500015 under my guides supervision
- Involved in vibration measurements on various kinds of vehicles and structures
- Involved in Sound (Noise level) measurements on various parts such as mufflers, home appliances mixer grinder and washing machine
- Teaching Assistant for many theory courses like Design of machine Elements, Multi-body dynamics
- Teaching Assistant for M.Tech Vibration lab. course

8. Sri Ram Engineering College, Perumalpattu-602024 (near Chennai) (Jan. 1996 to July 2005)

Assistant Professor (June 2001 to July 2005) & Lecturer (Jan. 1996 to June 2001)

- Taught both under graduate and post graduate M.E. (CIM) courses
- Setup many laboratories (such as dynamics, instrumentation, metrology etc.)
- Acted as HOD (in charge) on many occasions
- Coordinated with university examinations and professional courses entrance examinations as Addl. Chief Superintendent
- Acted as Chief Examiner in central valuation of Anna University
- Acted as University representative for conducting examinations at other colleges
- Setup question papers/key for different universities
- Organized a national level 3 day technical symposium (NSMET) in 2005
- Certified Internal Quality Auditor for ISO certification
- Faculty advisor for student chapter of ISTE, SAE

9. Raja Rajeswari Engineering College, Chennai-600095 (Oct. 1995 to Jan. 1996) Lecturer

- Taught under graduate courses: Engineering Drawing and Basic Workshop
- Setup basic engineering workshop

10. St. Michael's Polytechnic College, Avadi, Chennai-600062 (Nov. 1994 to Sep. 1995) Associate Lecturer

- Taught diploma level courses
- Acted as examiner in Directorate of Technical Examinations
- Obtained highest percentage of pass in Technical Drawing subject

11. Prasanth Tanks (Nov. 1993 to Oct. 1994)

Quality Assurance Engineer

• Radiography, MPI, UT Inspection for pressure vessels

10. Chordia Rubber Products Pvt. Ltd. (Jan. 1993 to Oct.1993)

- Responsible for preparation of drawings in AutoCAD
- Supervising the production of die
- Quality inspection

Research Publications

International Journals

- 1. **B. Janarthanan, Chandramouli Padmanabhan and C. Sujatha**, "Lateral Dynamics of a Single unit Skid-Steered Tracked Vehicle", *International Journal of Automotive Technology*, Springer (Vol.12, No.6, 2012)
- 2. **B. Janarthanan, Chandramouli Padmanabhan and C. Sujatha**, "Longitudinal Dynamics of a Tracked Vehicle: Simulation and Experiment", *Journal of Terramechanics*, Elsevier (vol.49, issue.2, pp-63-72, April 2012).
- 3. **S. Suresh and B. Janarthanan**, "A review on influence of thermal studies of Nanomaterials", International Journal of Materials Science and Applications 3 (6), 370-377, 2014
- 4. **B. Janarthanan and S. Suresh**, "Thermal Energy Storage using Phase Change Materials and their Applications: A Review", International Journal of ChemTech Research 8 (6), 250-256, 2015

International Conferences

- 1. **B. Janarthanan, Chandramouli Padmanabhan and C. Sujatha**, "Modeling of Diesel engine and Automatic Transmission of a Tracked Vehicle", **SAE paper No. 2009-01-1860**, *SAE International Powertrains, Fuels and Lubricants meeting, June 15-17, 2009, Florence, Italy*
- 2. B. Janarthanan, C. Sujatha and Chandramouli Padmanabhan, "Skid Steering Analysis of Tracked Vehicles", SAE Paper No. 2009-28-0063, International Mobility Engineering Congress and Exposition 2009, SAE-India, December 13-15, 2009, Chennai, India.
- 3. B. Janarthanan, "Modeling and Simulation of an Automotive Drivetrain", Abstract accepted for 1st International Conference on Mechanical Power Transmission (ICMPT-2019) to be held at IIT Madras during 11-13 July 2019

National Conferences

- 1. **B. Janarthanan, Chandramouli Padmanabhan and C. Sujatha**, "Automotive Engine Modeling and Simulation using Matlab/Simulink" *National Conference on Design and Manufacturing Issues in Automotive and Allied Industries, IPRoMM 2009, July 10-11, 2009, Chennai, India*
- **2. B. Janarthanan,** , "MODELING AND SIMULATION OF AN AUTOMOTIVE DRIVETRAIN", "1st National Conference on Recent Advances in Materials Science & Nanotechnology (RAMN)-2017 held on 26th and 27th May 2017 at AMET University, Chennai

Recently organized programmes (last three years)

- Two weeks FDP on "Kinematics of Machinery" approved by Anna University at MNM Jain Engineering College from 26th Nov. to 8th Dec. 2018
- Two days FDP on "Engineering Thermodynamics" at MNM Jain Engineering College on 15th & 16th May 2017
- One day National conference on Advances in Mechanical Engineering (NCAME'17)" on 25.03.2017.
- One day National Workshop on "Computational Fluid Dynamics" on 23rd Jan. 2018

Recently delivered lectures

- Resource person in Faculty Development and Training Programme on "Engineering mechanics" at St. Joseph's Institute of technology on 22.11.19
- Resource person for two sessions in Faculty Development and Training Programme on Kinematics of Machinery at MNM Jain Engineering College held from 26th Nov. to 8th Dec. 2018
- "Mechanical Vibrations and vehicle dynamics" at Sri Venkateswara College of Engineering, Sriperumbudur, Chennai on 13.10.2018
- Chief guest for valedictory function of technical symposium TRAXION 2018 at Sri Venkateswara College of Engineering, Sriperumbudur, Chennai on 13.10.2018
- "Simulation of Mechanical Systems using MATLAB" at Hindustan University, Chennai on 17.10.2017

Recently attended seminar/workshops/FDPs/ training programmes (last three years)

- Lecture meeting on "Evolution of Signal processing techniques for machinery diagnosis" attended on 21.12.19 at Lemon Tree Hotel organized by SAEISS
- National Finite Element Developers/Users Meet 2018 (NAFED 2018) on 14th Dec. 2018 at Panimalar Engineering College, Chennai organized by Vikram Sarabhai Space Centre (ISRO)
- NPTEL online course on "Design practice-2" during Aug-Oct 2018 with gold and topper certificate
- AICTE-FDP course on "Design Practice-2" through NPTEL during Aug-Oct 2018 with a consolidated score of 93 %
- Two days FDP on "Decision making Skills" on 30th & 31st Aug. 2018 at Misrimal Navajee
 Munoth Jain Engineering College, Chennai organized by ICT Academy
- One day workshop on "Computational Fluid Dynamics" on 23rd Jan. 2018 at Misrimal Navajee Munoth Jain Engineering College, Chennai organized by the department of mechanical engineering
- One-week FDP on "Kinematics of Machinery" 13th to 19th Dec. 2017 at KCG College of Technology, Chennai approved and funded by Anna University
- Two days FDP on "Engineering Thermodynamics" 15th & 16th May 2017 at Misrimal Navajee Munoth Jain Engineering College, Chennai organized by the department of mechanical engineering
- AICTE sponsored STC on "Tribology in Design" 7th to 12th Nov. 2016 organised by the department of mechanical engineering, IIT Madras
- One day national level seminar in "composite materials and welding technology" held on 2nd
 Sep. 2016 at AMET university, Chennai
- Two days "champion leadership workshop" on 30th and 31st July 2016 at SAE India Southern Section office, Chennai organized by SAESS
- One day workshop on "Recent Developments in Automotive Powertrain" on 13th May 2016 at Sri Venkateswara College of Engineering, Chennai organized by the department of automobile engineering

Theory Courses taught at undergraduate level

Engineering Mechanics (Statics and Dynamics)

Engineering Graphics

Strength of Materials

Mechanics of Machines (Kinematics and Dynamics)

Finite Element Analysis

Automobile Engineering

Robotics

Vehicle Dynamics for Automobile Engineering

Machine Drawing

Design of Machine Elements

Design of Transmission Systems

Engineering Metrology

Statistical Quality Control and Reliability Engineering

Operations Research

Lab Courses taught at undergraduate level

Basic Engineering Workshop Dynamics lab Instrumentation Lab CAD/CAM Lab Strength of Materials Lab Machine Shop

Courses taught at postgraduate level

Integrated Mechanical Design

Finite Element Analysis (for BITS off-campus as guest faculty)

Applied Materials Engineering

Vehicle Dynamics (for BITS off-campus as guest faculty)

References

Acadmic persons

Prof. Dr. Gnanamoorthy R.

(former director of IIITDM)

Professor

Room No. 211, Machine Design Section Department of Mechanical Engineering Indian Institute of Technology Madras

Chennai - 600036

Phone: +91-44-22574691 Email: gmoorthy@iitm.ac.in

Prof. Dr. C. Sujatha

Room No. 407, Machine Design Section Department of Mechanical Engineering Indian Institute of Technology Madras

Chennai - 600036

Phone: +91-44-22574682 Email: sujatha@iitm.ac.in

Prof. Dr. P. Chandramouli

Room No. 401, Machine Design Section Department of Mechanical Engineering Indian Institute of Technology Madras

Chennai - 600036

Phone: +91-44-22574690 **Email**: mouli@iitm.ac.in

R&D persons

Dr. P. Sivakumar, Distinguished Scientist, **Former Director**

Combat Vehicles Research and Development Establishment (CVRDE), DRDO

Avadi, Chennai – 600054

Email: pvelusivakumar@yahoo.co.in

Dr. U. Solomon, Scientist 'G' Additional Director

Combat Vehicles Research and Development Establishment (CVRDE), DRDO

Avadi, Chennai – 600054 Phone: +91-44-26364125 Email: usolomon@gmail.com

Dr. G. Balamurugan

Scientist 'F' and Group Head Mechanical Systems Design Professor, AcSIR, Govt. of India National Aerospace Laboratories (NAL)

Bangalore – 560 037 Phone: 080-25086309 Email: gbala@nal.res.in

Membership is Societies

- Member of Society of Automotive Engineers (SAE International)
- Life member of Indian Society for Technical Education (ISTE)
- Member of International Association of Engineers (IAENG)
- Member of International Society for Terrain Vehicle Systems (ISTVS)
- Fellow member of International Society for Research & Development (ISRD)

Personal Details

Date of birth : 5th Jan. 1971 Age : 48 years

Gender : Male

Marital status : Married and wife is Joint Director in Geology & Mining Dept.,

Government of TN, Guindy, Chennai

Children : one daughter studying 10th std. at Kendriya Vidyalaya, IITM campus

Nationality : Indian Religion : Hindu

Languages : English, Tamil, Hindi (Read and Write) and Telugu (Speak only)

Home town : Srivilliputtur, Virudhunagar Dist. Tamilnadu, India

Other Credentials:

- Recognised Research Supervisor of Anna University (Ref. No.2620054)
- Guest faculty for BITS off-campus (face to face and online classes)
- Editorial board member in the journal "Trends in Machine Design"
- Member Board of Studies at Sathyabama University
- Having close association with CVRDE, Avadi (DRDO) laboratory
- Obtained funding of 50 lakhs from CVRDE (DRDO) under the guidance of Prof.
 Chandramouli and Prof. Sujatha at IIT Madras for my Ph.D work
- Obtained funding of 10 lakhs from Army Technology Board (ATB), Secunderabad-500015 under my guides supervision
- Obtained funding from Tamilnadu State Council for Science and Technology for students project for two consecutive years 2018 and 2019 under my guidance
- Organised & Attended many short-term training courses for faculty development programs
- Topper with Gold in NPTEL online course on "Design Practice-II" during Aug-Oct.2018
- Question paper setter for various universities
- Acted as Chief Superintendent of Madras and Anna University examinations

Declaration

I hereby declare that all information furnished in this resume is true to the best of my knowledge

Place: Chennai Yours sincerely,

Date: 24.08.2023 (B. Janarthanan)