

# BIO DATA

1. Name: VISHWANATH HEGDE  
2. Date of Birth: 04. 07. 1963  
3. Highest Qualifications: Ph.D.  
4. Present status : Professor  
Dept. of EEE



## 5. Academic Performance :

Qualifications	Board / IIT / University	Institute and place where studied	Year of passing	Class & % marks
SSLC	KSE Board	S.V.High School,Goli	1979	FC 79.5%
PUC	P U Board	P.C.Jabin Science College, Hubli	1981	FC 74.3%
B.E.	Mysore	MCE, Hassan	1985	FC 71.2%
M.E.	IISc.	IISc, Bangalore	1991	CGPA : 5.1/8
Ph. D.	IISc.	IISc, Bangalore	2007	CGPA : 6.5

## 6 Address:

### Official:

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Professor, Department of Electrical  
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### Residential:

Vishwanath Hegde,  
ANUGRAHA, Next to BSNL Office,  
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INDIA, Mobile + 91 9449207412

- B.E. - Electrical & Electronics Engineering,  
**Project Title:** Microprocessor Based Protection of Industrial drives
- M.E. – Systems Science and Automation,  
**Thesis Title:** Programmable Numeric Accelerator
- Ph.D. – Electrical Engineering,(High Voltage Engineering)  
**Thesis Title:** Lightning Protection System to Indian Satellite Launch Pads: Stroke Classification and Evaluation of Current in the Intercepted Strokes

**7. Membership of Professional Bodies:** Life Member of ISTE LM1793  
Member Institution of Engineers M 125761

**8. Research Interests:** Modeling of lightning, Lightning protection, Electromagnetic field analysis pertaining to insulation and lightning, Microprocessors and Microcontroller applications to protection problems

**9. Subjects Taught: UG** Electrical Machines, Design of Electrical Machines, Microprocessors, Computer Organization, Network Analysis, Circuits, High Voltage Engineering, Power system protection & Solid state Relays, Over voltages in Power System etc.

**PG** Advanced Microprocessors, Microprocessors and Microcontroller Applications, Environmental Aspects of Electrical power Transmission and Distribution, Renewable Energy Sources, Real Time digital Signal Processing

**Industrial Training:** *Obtained industrial training at New Government Electric Factory, Bangalore, in design and Testing of Electrical Machines*

**10. Research Guidance:** Guiding two students for their Ph.D at present

**11. Visits Abroad:** 1. Visited Nanyang Technological University Singapore for an international conference.

2. Visited Bangkok, Thailand for an international conference.

**12. Resource Person:** Worked as subject matter expert in the e-learning program of VTU for the subjects: DC and Synchronous Machines, and Electrical Machine Design

**List of Publications:**

**International Journals:**

1. Udaya Kumar, **Vishwanath Hegde** and Vinoda. S "*Preliminary Studies on the Characteristics of the Induced Currents in Simple Down Conductors due to a nearby strike*", **IEEE - Trans. Electromagnetic Compatibility, Vol. 48, No. 4, pp. 805-816, Nov. 2006**

2. Udaya Kumar, **Vishwanath Hegde** and Pranavkumar Darji, “*Investigations on the Voltages and Currents in the Lightning Protection System of the Indian Satellite Launch Pad-I During a Stroke Interception*”, **IET Proceedings, Science Measurement & Technology**, vol. 1, no. 5, pp 225-231 Sept 2007.
3. **Vishwanath Hegde**, Udaya Kumar, “Studies on Characteristics of lightning generated currents in an interconnected lightning protection system, **Journal of Electrostatics**, Vol. 67, Issue 4, pp 590-596 May 2009.
4. **Vishwanath Hegde**, Govind Kunkolienker and Udaya Kumar, “*Numerical Electromagnetic Analysis of Current and Voltage Distribution along Down Conductors and Towers hit by Direct Lightning*”, **Electric Power Components and Systems; Taylor and Francis, UK**, Vol.39, No. 3, pp 225 – 236, Feb. 2011. \
5. **Vishwanath Hegde** and Maruthi. G. S. “Experimental investigation on detection of air gap eccentricity in induction motors by current and vibration signature analysis using non-invasive sensors” , Energy Procedia, (Elsevier) No.14, pp - 1047 – 1052, Feb. 2012.
6. Vinoda. S **Vishwanath Hegde** and Udaya Kumar, “On the Influence of Neighboring conducting Objects on the Induced Currents in Simple Down Conductors due to Nearby Lightning strike” Submitted to **Electric Power Components and Systems; Taylor and Francis, UK.**, Accepted for publication.

### **International Conferences:**

7. **Vishwanath Hegde and** Udaya Kumar, “Classification of strokes and Identification of stroke location from the measured Tower base Currents of LPS to Indian Satellite Launch Pad-I ”, **Proceedings of 8<sup>th</sup> International Power Engineering Conference, Nanyang Technological University, Singapore**, , pp1603-1608 Dec. 2007
8. Maruthi. G. S., Panduranga Vittal, and **Vishwanath Hegde** “Development of MEMS Accelerometer Based Fault Diagnostic Unit for Three Phase Squirrel Cage Induction Motor Using Intel 80196 KB Microcontroller”, Proceedings of International Conference on Electrical Rotating Machines -ELROMA - 2008 Mumbai, India, , pp vi37 – vi49, 21-22, Jan. 2008.
9. Seema Vachhani and **Vishwanath Hegde**, “Design of Control Logic for Variable Frequency Drive Unit for position Control of Antenna”, Proceedings of International Conference on Innovative Science and Engineering Technology, V.V.P. Engineering College, Rajkot, Gujrat, India, pp 549-554, 8<sup>th</sup> -9<sup>th</sup>, April 2011.
10. Maruthi. G. S.and **Vishwanath Hegde** “Experimental investigation of single phase and blocked rotor condition of three phase induction motors by vibration signature analysis using MEMS accelerometer”, International Conference on Enhancement in Power Electronics and Controls, PSG College of Technology, Coimbatore, India, pp 107 - 113, 24-25, November 2011.
11. Maruthi. G. S.and **Vishwanath Hegde**, “ **Experimental Investigation on detection of air gap eccentricity in induction motors by current and**

**vibration signature analysis using non-invasive sensors.** International Conference on Advances in Energy Engineering, Paper id 312, Bangkok, Thailand 27 – 28, December 2011.

### **National Conferences:**

12. Vinoda Shivand, **Vishwanath Hegde** and Udaya Kumar, “ Effect of near by conducting objects on the induced currents in simple down conductors due to an indirect Lightning Strike”, Proceedings of The EE Centenary conference, IISc, Bangalore, 15-17, December 2011.
13. Udaya Kumar, **Vishwanath Hegde** and Govind R Kunkolienker, “*Lightning Current Distribution Along typical Down Conductors*”, **National Power System Conference 04, (NPSC 2004) IIT Madras, Chennai, India, December 2004. pp 552-556.**
14. Udaya Kumar, Govind R. Kunkolienker and **Vishwanath Hegde**, “*Can We Have a Separate Down Conductor for Metallic and RCC Towers*”, **National Power System Conference 04, IIT Madras, Chennai, India, December 2004. pp 547-551.**
15. R Shivarudra Swamy, **Vishwanatha Hegde**, NA Ranjan, MS Raviprakash & HG Gopal, “Demand-side avenues to implement energy management programs in industries”, **National Seminar on Energy efficient electrical apparatus & systems, PVG’s College of Engineering, Pune. Feb.21-22, 2003, pp-109-113.**
16. N.S. Jyothi, **Vishwanath Hegde**, H.G. Gopal and H.N. Suresh, “*Self excited induction generator – A constituent of dispersed generation*”, Proceedings of **National workshop on energy auditing and demand side management, June 1998, pp 111–115.**
17. GK Purushothama, A Narendranath Udupa, KN Balasubramanya Murthy, MS Raviprakash, & **Vishwanath Hegde**, “*Energy Efficient Motors & Time-of-Use Pricing as Demand Side Management Alternatives*”, **National Workshop on Energy Auditing & Demand Side Management, Malnad College of Engineering, Hassan, India, June 26-27, 1998, pp. 101-110.**
18. **Vishwanath Hegde**, V.N. Nandakumar and N.S. Jyothi, “*Solid State Input Power factor Conditioner with Active Current Wave shaping*”, **Proceedings of National System Conference, January 14 – 16, 1995, DEI Agra, pp 489 – 492.**
19. Jyothi N.S. and **Vishwanath Hegde**, “Constant Voltage Self-excited Induction Generators”, **Proceedings of National Conference on Energy Conservation, March 13–14, 1995, IGIT Sarang, Orissa, pp 57 – 62.**