



## Sinhgad Technical Education Society's

Sinhgad College of Engineering  
Vadgaon (Budruk) Off. Sinhgad Road, S.No. 44/1,



Prof. Rakesh Babu Dhumale

BE ENTC

rbdhumale.scoe@sinhgad.edu

9970823266

### Significant Achievement

→ AVISHKAR-2013 Winner of University Level Research Competition

### Academic Qualification

| Degree         | Institute Name  | University Name                  | Year of Passing | Percentage | Grade      | Qualification Status |
|----------------|---|----------------------------------|-----------------|------------|------------|----------------------|
| BE Electronics | Tatyasaheb Kore Institute of Engineering and Technology | Shivaji university               | 2006            | 71.76%     | Distiction | Completed            |
| M.TECH.        | Department of Technology, Shivaji University, Kolhapur. | Shivaji university               | 2010            | 76.25%     | -          | Completed            |
| PhD            | Sinhgad College of Engineering, Pune.                   | Savitribai phule pune university | -               | -          | -          | Pursuing             |

### Conference Details

| Name  | Venue                                | Date                       | Level    | Category | Type | Sponsored By                         |
|---|--------------------------------------|----------------------------|----------|----------|------|--------------------------------------|
| Innovation 2013                                 | RSCOE, Pune.                         | 18 Apr 2013 to 18 Apr 2013 | National | Research |      | University of Pune.                  |
| National Conference on Pervasing Computing-2010 | Sinhgad college of Engineering, Pune | 09 Oct 2010 to 10 Oct 2010 | National | Research |      | Sinhgad college of Engineering, Pune |
| National Conference on Pervasing Computing-2010 | Sinhgad college of Engineering, Pune | 09 Oct 2010 to 10 Oct 2010 | National | Research |      | Sinhgad college of Engineering, Pune |

|  |                                       |                            |          |          |  |                               |
|--|---------------------------------------|----------------------------|----------|----------|--|-------------------------------|
| Emerging Technologies for Sustainable Developments | Shivaji University, Kolhapur          | 27 Dec 2012 to 28 Dec 2012 | National | Research |  | Shivaji University, Kolhapur. |
| National Conference on Pervasive Computing         | Sinhgad College of engineering, Pune, | 15 Mar 2013 to 16 Mar 2013 | National | Research |  | AICTE, New Delhi.             |

## Research Projects

| Project name   | Description  | Status     | Budget | Project type       |
|--|--|------------|--------|--------------------|
| Life cycle monitoring of DC link Electrolytic Capacitor in Power Converter by using Fuzzy Neural Network   |  | 80         | 130000 | Sponsored Projects |
| Fault detection and Diagnosis of Three Phase Voltage Source Inverter using discrete Wavelet Transform and Adaptive Neuro Fuzzy Interface System. | The faults are detected using wavelet transform and for classification of fault artificial intelligence is used. The system is used to detect open circuit and short circuit fault in VSI. | In Process | 300000 | Others             |

## Consultancy Details

| Title             | Description                   | Agency   | Percentage Completion | Amount Sanctioned | Amount Received |
|-------------------|-------------------------------|--|-----------------------|-------------------|-----------------|
| Packaging Machine | Problem on three phase servos | Nichrome India Ltd. Shrimal, Gat no. 769b, At Post Wing, Tal. Khandala, Dist. Satara | 100                   | 00                | 00              |

## Research Papers and Journals

| ISSN/ISBN No      | Paper Title  | Publish Date | Journal/Conference Name   | Level                         | Paper Status           | Authors        |
|-------------------|--|--------------|---|-------------------------------|------------------------|----------------|
| NA                | Life Cycle Monitoring of DC Link Electrolytic Capacitor in Power Converter: A Review | 2012         | National Conference in Emerging Technology                                  | Conference - National level   | Accepted and Published | Rakesh Dhumale |
| p-ISSN: 2321-7308 | OPEN SWITCH FAULT DIAGNOSIS IN THREE PHASE INVERTER USING DIAGNOSTIC VARIABLE METHOD | 2013         | IJRET-International Journal of Research in Engineering and Technology       | Journal - International level | Accepted and Published | Rakesh Dhumale |
| ----              | Fault detection and Diagnosis of Three Phase Voltage Source Inverter                 | 2014         | Avishkar-2013   | Other                         | Accepted and Published | Rakesh Dhumale |
| 2319-1163         | Electrolytic Capacitor Online Failure Detection and Life Prediction Methodology      | 2015         | Int. J. Research in Engg. And Techn., vol.4, Iss. 2, pp.636-641, Feb. 2015. | Journal - International level | Accepted and Published | Rakesh Dhumale |

|           |   |      |   |                               |                        |                |
|-----------|---|------|---|-------------------------------|------------------------|----------------|
| 2319-7064 | Online Failure Prediction of the Aluminum Electrolytic Capacitor  | 2015 | Int. J. Science and Research, vol.4, Iss. 6, pp.2099-2102, June . 2015.   | Journal - International level | Accepted and Published | Rakesh Dhumale |
| 2319-1163 | Fault Detection and Diagnosis of High Speed Switching Devices in Power Converter                                  | 2015 | ”, Int. J. Research in Engg. And Techn., vol.4, Iss. 2, pp.636-641, Feb. 2015.  | Journal - International level | Accepted and Published | Rakesh Dhumale |
| 2319-2690 | Method of Open Switch Fault Detection in Three Phase Inverter using Artificial Neural Network                     | 2014 | Int. J. Research in Science and Advance Technology, Vol. 3, Iss. 3, PP 78-82, June 2014.                                | Journal - International level | Accepted and Published | Rakesh Dhumale |
| 2227-5870 | Fault Detection and Diagnosis Technique for Power Inverter using Discrete Wavelet Transform                       | 2014 | Int. J. Electronics Circuits and systems, Vol. 3, Iss. 2, pp 174-178, June 2014   | Journal - International level | Accepted and Published | Rakesh Dhumale |
| 2392-2019 | DC-DC Converter for Solar Energy Harvesting using PID Controller  | 2015 | Int. J. Engineering Applications and Technology, Vol. 1, Iss. 13, pp 132-136, July 2105.                                | Journal - International level | Accepted and Published | Rakesh Dhumale |
| 2319-1163 | DC-DC Converter using Fuzzy Logic Controller  | 2015 | ”, Int. J. Research in Engg. and Techn., vol.4, Iss.07, pp.490-696, July. 2015.   | Journal - International level | Accepted and Published | Rakesh Dhumale |
| 2319-1163 | DC-DC Converter using Fuzzy Logic Controller  | 2015 | ”, Int. Research J. in Engg. And Techn.,  | Journal - International level | Accepted and Published | Rakesh Dhumale |
| 2319-1163 | Android Application for S-Park System   | 2015 | Int. J. Research in Engg. And Techn., vol.4, Iss. 2, pp.636-641, Oct. 2015.   | Journal - International level | Accepted and Published | Rakesh Dhumale |
| 1875-8967 | Diagnosis of multiple open switch faults in three phase voltage source inverter                                   | 2016 | Journal of Intelligent and Fuzzy Systems, vol. 30, iss. 4, pp-2055-2065   | Refereed and Indexed Journal  | Accepted and Published | Rakesh Dhumale |
| 263-224   | Neural Network Fault Diagnosis of Voltage Source Inverter under Variable Load Conditions at Different Frequencies | 2016 | Measurement, vol. 91, pp-565-575, Sept. 2016.   | Refereed and Indexed Journal  | Accepted and Published | Rakesh Dhumale |
| 2278-943x | Dual Band Fractal Antenna   | 2015 | International Journal of Electrical and Electronics Engineering Research (IJEEER), Vol. 5, Iss. 6; pp 11-18, Dec. 2015. | Journal - International level | Accepted and Published | Rakesh Dhumale |

|                   |  |      |   |                                |                        |                |
|-------------------|--|------|---|--------------------------------|------------------------|----------------|
| 978-1-4673-7758-4 | Real Time Remaining Useful Life Prediction of the Electrolytic Capacitor                                       | 2015 | IEEE International Conference on Information Processing (ICIP), Vishwakarma Institute of Technology, Pune, pp. 631-636  | Conference-International level | Accepted and Published | Rakesh Dhumale |
| 2320-9569         | Condition Monitoring of Voltage Source Inverter  | 2015 | 2nd International Conference on Research Trends in Electronics and Telecommunication (IRTET, IRET, Anakapalli, Visakhapatnam, Andhra Pradesh, India,  | Conference-International level | Accepted and Published | Rakesh Dhumale |
| --                | Compact Fractal Antenna  | 2016 | ”, First international conference on Recent Trends in Computing, Communication and Science (ICRTCCS), International Institute of Information Technology, Rajiv Gandhi InfoTech Park, Phase-I, Hinjawadi, Pune | Conference-International level | Accepted and Published | Rakesh Dhumale |
| ---               | Comparative Study of Fault Diagnostic Methods in Voltage Source Inverter Fed Three Phase Induction Motor Drive | 2016 | Proc. In International Conference On Frontiers In Mechanical And Automobile Engineering FAME-2016, pp.19, 7th-9th July 2016   | Conference-International level | Accepted and Published |                |
| ---               | Comparative Study of Fault Diagnostic Methods in Voltage Source Inverter Fed Three Phase Induction Motor Drive | 2016 | Proc. In International Conference On Frontiers In Mechanical And Automobile Engineering FAME-2016, pp.19, 7th-9th July 2016   | Conference-International level | Accepted and Published | Rakesh Dhumale |
| --                | Life Cycle Monitoring of Electrolytic Capacitor in Power converter using Fuzzy Neural Network                  | 2015 | in Proc. Savitribai Phule Pune University, BCUD, Regional Research Conference for University and College Teachers Innovation-2015, 1st July 2015, pp-20.  | Other                          | Accepted and Published | Rakesh Dhumale |

**Post Held**

| Organization Name | Post | Organization Category | Appointment Status | Duration |
|-------------------|------|-----------------------|--------------------|----------|
|-------------------|------|-----------------------|--------------------|----------|

|   |          |                   |                     |                            |
|---|----------|-------------------|---------------------|----------------------------|
| Dnyanganga College of Engineering and Research,Pune-53. | Narhe    | private institute | Full Time/Permanent | Jun 01,2008 to Jul 19,2010 |
| Sinhgad College of Engineering,Pune-41.                 | Vadgaon. | private institute | Full Time/Permanent | Jul 20,2010 to             |

## Self Contribution

| <b>Organizational Development Contribution(NaN-NaN)</b> |   |  |   |
|---|---|--|---|
| <b>Date</b>   | <b>Venue</b>  | <b>Contribution</b>                      | <b>Category</b>   |
| 13,Dec - 17,Dec   | Sinhgad Technical Education Society (STES) , Narhe Campus, Pune | Worked in Transportation Committee       | Organizing committee member                                       |
| 16,Dec - 17,Dec   | Sinhgad College of Engineering,Pune.                            | Worked in Different organising committee | Organizing committee member                                       |
| 25,Jan - 25,Jan   | STES Erandawana   | Transportation Committee Member          | Transportation Committee in STES's University Selection Interview |

| <b>Academic Development Contribution(2011-2012)</b> |                                      |   |                             |
|---|--------------------------------------|---|-----------------------------|
| <b>Date</b>   | <b>Venue</b>                         | <b>Contribution</b>                               | <b>Category</b>             |
| 16,Dec - 17,Dec                                     | Sinhgad College of Engineering,Pune. | Worked in different committees for Avishkar 2011. | Organizing committee member |

| <b>Academic Development Contribution(2010-2011)</b> |                                      |  |                             |
|---|--------------------------------------|--|-----------------------------|
| <b>Date</b>   | <b>Venue</b>                         | <b>Contribution</b>  | <b>Category</b>             |
| 15,Jul - 17,Jul                                     | Sinhgad College of Engineering,Pune. | Transportation Committee Member in INNOVATION 2010.                                    | Organizing committee member |
| 09,Jun - 13,Jul                                     | Sinhgad College of Engineering,Pune. | Worked in scrutiny, supervision, data entry and paper checking for M.E. entrance test. | Organizing committee member |
| 10,Feb - 12,Jul                                     | Sinhgad College of Engineering,Pune. | Worked for Excelsior.  | Organizing committee member |

| <b>Institutional Development Contribution(2011-2012)</b> |                                      |   |                             |
|--|--------------------------------------|---|-----------------------------|
| <b>Date</b>  | <b>Venue</b>                         | <b>Contribution</b>   | <b>Category</b>             |
| 10,Mar - 12,Mar  | Gadhinglaj,Kolhapur.                 | Companying at College of Engineering, Pune and Gadhinglaj (Kolhapur) organized by "Sakal".  | Organizing committee member |
|  | Sinhgad College of Engineering,Pune. | Working as First Year subject (Basic Electronics Engineering) Coordinator since last three semesters (Appreciated by Principal and FE Coordinator). | Subject Coordinator         |

| <b>Institutional Development Contribution(2012-2013)</b> |                                      |   |                     |
|--|--------------------------------------|---|---------------------|
| <b>Date</b>  | <b>Venue</b>                         | <b>Contribution</b>   | <b>Category</b>     |
| 01,Jul - 30,Apr  | Sinhgad College of Engineering,Pune. | Working as First Year subject (Basic Electronics Engineering) Coordinator since last three semesters (Appreciated by Principal and FE Coordinator). | Subject Coordinator |
| 01,Jul - 30,Jun  | Sinhgad College of Engineering,Pune. | Purchase Committee Member.  | Member of Committee |

| <b>Institutional Development Contribution(2012-2013)</b> |                                      |                     |                 |
|--|--------------------------------------|---------------------|-----------------|
| <b>Date</b>  | <b>Venue</b>                         | <b>Contribution</b> | <b>Category</b> |
|  | Sinhgad College of engineering,Pune. | Test Coordinator    | Coordination    |

| <b>Institutional Development Contribution(2010-2011)</b> |                                      |                     |                 |
|--|--------------------------------------|---------------------|-----------------|
| <b>Date</b>  | <b>Venue</b>                         | <b>Contribution</b> | <b>Category</b> |
| 10,Feb - 12,Feb  | Sinhgad College of Engineering,Pune. | Test Coordinator    | Coordination    |

| <b>Institutional Development Contribution(2010-2011)</b> |                                       |                      |                  |
|--|---------------------------------------|----------------------|------------------|
| <b>Date</b>  | <b>Venue</b>                          | <b>Contribution</b>  | <b>Category</b>  |
| 10, Feb - 11, Feb  | Sinhgad College of Engineering, Pune. | Worked for Excelsior | committee member |

| <b>Self Growth(2008-2009)</b> |                               |  |                 |
|-------------------------------|-------------------------------|--|-----------------|
| <b>Date</b>                   | <b>Venue</b>                  | <b>Contribution</b>  | <b>Category</b> |
| 20, Feb - 20, Feb             | Shivaji University, Kolhapur. | UGC sponsored NET workshop organized by Electronics Department, Shivaji University, Kolhapur. Subject: Network Analysis dated on 20/02/2009. | Guest Lecture   |

| <b>Academic Development Contribution(2010-2011)</b> |              |                     |                 |
|---|--------------|---------------------|-----------------|
| <b>Date</b>   | <b>Venue</b> | <b>Contribution</b> | <b>Category</b> |

| <b>Institutional Development Contribution(2010-2011)</b> |              |                     |                 |
|--|--------------|---------------------|-----------------|
| <b>Date</b>  | <b>Venue</b> | <b>Contribution</b> | <b>Category</b> |

| <b>Student Development Contribution(2010-2011)</b> |                                       |                     |                  |
|--|---------------------------------------|---------------------|------------------|
| <b>Date</b>  | <b>Venue</b>                          | <b>Contribution</b> | <b>Category</b>  |
| 01, Jul - 30, Jun                                  | Sinhgad College of Engineering, Pune. | Teacher Guardian    | Teacher Guardian |

| <b>Student Development Contribution(2008-2009)</b> |              |                     |                 |
|--|--------------|---------------------|-----------------|
| <b>Date</b>  | <b>Venue</b> | <b>Contribution</b> | <b>Category</b> |

| <b>Student Development Contribution(2008-2009)</b> |              |                     |                 |
|--|--------------|---------------------|-----------------|
| <b>Date</b>  | <b>Venue</b> | <b>Contribution</b> | <b>Category</b> |

| <b>Self Growth(2009-2010)</b> |                               |  |                 |
|-------------------------------|-------------------------------|--|-----------------|
| <b>Date</b>                   | <b>Venue</b>                  | <b>Contribution</b>  | <b>Category</b> |
| 24, Jan                       | Shivaji University, Kolhapur. | UGC sponsored NET workshop organized by Electronics Department, Shivaji University, Kolhapur. Subject: Network Analysis dated on 20/02/2009. | Guest Lecture   |

| <b>Self Growth(2010-2011)</b> |                               |                               |                 |
|-------------------------------|-------------------------------|-------------------------------|-----------------|
| <b>Date</b>                   | <b>Venue</b>                  | <b>Contribution</b>           | <b>Category</b> |
| 14, Apr - 15, Apr             | Shivaji University, Kolhapur. | Attended National Conference. | Attendee        |

| <b>Self Growth(2011-2012)</b> |                               |   |                 |
|-------------------------------|-------------------------------|---|-----------------|
| <b>Date</b>                   | <b>Venue</b>                  | <b>Contribution</b>   | <b>Category</b> |
| 11, Jan                       | Shivaji University, Kolhapur. | UGC sponsored NET workshop organized by Electronics Department, Shivaji University, Kolhapur. Subject: Power Electronics II dated 11/01/2012. | Guest Lecture   |

| <b>Self Growth(2012-2013)</b> |                                  |   |                 |
|-------------------------------|----------------------------------|---|-----------------|
| <b>Date</b>                   | <b>Venue</b>                     | <b>Contribution</b>   | <b>Category</b> |
| 14, Apr                       | Shivaji University, Kolhapur.    | UGC sponsored NET workshop organized by Electronics Department, Shivaji University, Kolhapur. Subject: Power electronics dated on 14/04/2013. | Guest Lecture   |
| 13, Feb                       | Sinhgad College of Science, Pune | Sinhgad College of Science, Pune, Subject Genetic Algorithm, Dated 13/02/2013.  | Guest Lecture   |

|        |                                  |   |                   |
|--------|----------------------------------|---|-------------------|
| 24,Jan | Sinhgad College of Science, Pune | Judge at "Poster Competition" in PROELEX-13, Sinhgad College of Science, Pune, Dated 24/01/2013.                    | Judge             |
| 06,May | Shivaji University, Kolhapur.    | External Examiner at Shivaji University, Kolhapur. Subject: Power electronics dated on 06/05/2013 for M.Sc. Part I. | External examiner |

| <b>Institutional Development Contribution(2013-2014)</b> |              |   |                     |
|--|--------------|---|---------------------|
| <b>Date</b>  | <b>Venue</b> | <b>Contribution</b>   | <b>Category</b>     |
| 11,Feb - 23,Oct  | PICT,Pune    | As external examiner University Exam                        | External Supervisor |
| 31,Oct - 31,Oct  | MITCOE,Pune  | External Examiner   | Examiner            |
| 16,Mar - 16,Mar  | SCOE,Pune.   | Supervision in Online exam                                  | Exam Supervision    |
| 15,Oct - 18,Oct  | SCOE,Pune    | LIC data preparation and coordination at departmental level | Co-ordination       |

| <b>Student Development Contribution(2013-2014)</b> |              |   |                 |
|--|--------------|---|-----------------|
| <b>Date</b>  | <b>Venue</b> | <b>Contribution</b>                                   | <b>Category</b> |
| 04,Feb - 06,Feb                                    | SCOE,Pune    | Event Coordinator for Componenet quest TECHTONIC-2104 | Coordination    |

| <b>Self Growth(2015-2016)</b> |  |  |                  |
|-------------------------------|--|--|------------------|
| <b>Date</b>                   | <b>Venue</b>   | <b>Contribution</b>                        | <b>Category</b>  |
| 31,Oct - 31,Oct               | Sinhgad College of Science, Pune   | Lecture on Subject Advanced Soft Computing | Guest Lecture    |
| 20,Mar - 20,Mar               | National Conference on Research, Design and Development in Engineering, Management anRajgad Dnyanpeeth Technical Campus, Dhangawadi, Pune. | Session Chair                              | Session comittee |
| 20,May - 20,May               | Shivaji University, Kolhapur   | Paper Assessment work                      | Paper Checker    |

## Declaration

I hereby declare that all the above information furnished by me are true to the best of my knowledge.

Date :13-Oct-2016

Prof. Rakesh Dhumale