

**GOVERNMENT POLYTECHNIC, ARVI**  
**FACULTY PROFILE**

**DEPARTMENT: Electronics and Telecommunication Engineering**

**DR. VIKAS JAIRAM DONGRE**

**OFFICE:**

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**RESIDENCE:**

C/o Arvind Gupta  
Tayde Layout, Gajanan Nagar, Arvi,  
District Wardha, Maharashtra.  
Pin- 442201



**PERSONAL:**

Date of Birth: 11<sup>th</sup> October 1969.  
Citizenship: Indian.  
Marital Status: Married.

**EDUCATION:**

Sr. No.	Diploma/ Degree	College	Board/ University	Year of Passing
1	Ph. D. (Electronics Engg.)	-	RTM Nagpur University	23rd May 2016
2	MA (Public Administration)	-	RTM Nagpur University	1996
3	M.E. (Electronics)	Walchand College of Engineering Sangli	Shivaji University Kolhapur	1994
4	B.E. (Electronics)	MIET Gondia	RTM Nagpur University	1991

5	HSC	MM Higher Secondary School Gondia	Nagpur Board	1987
6	SSC	D B Science College Gondia	Nagpur Board	1985

**Ph. D. Title:** *Design, Analysis, and Implementation of algorithms for Devanagari offline Character Recognition using Soft Computing Tools.*

**PRESENT POSITION :**

**Head Of Department (HOD),** Department of Electronics and Telecommunication Engineering, Govt. Polytechnic, Arvi, District Wardha, (Maharashtra).

**TEACHING EXPERIENCE:** 30 years

Sr. No	Post	Institute	From	To
1	Lecturer in Electronics	PDVVP College of Engineering Ahmednagar	03.08.1992	14.12.1992
2	Lecturer in Electronics	SSVPS College of Engineering, Dhule	15.12.1992	27.8.1994
3	Lecturer in Electronics	Govt. Polytechnic, Nagpur	29.8.1994 to	31-01-1996
4	Lecturer in Electronics	Govt. Polytechnic, Sakoli	01-02-1996	03-08-2007
5	Lecturer in Electronics	Govt. Polytechnic, Nagpur	04-08-2007	05-06-2012
6	Lecturer in Electronics	Govt. Polytechnic, Gondia	06-06-2012	03-08-2016
7	HOD Electronics	Govt. Polytechnic, Washim	04-08-2016	10-08-2021
8	HOD Electronics	Govt. Polytechnic, Arvi	11-08-2021	Till date

**Awards and Achievements:**

- GATE Scholarship with a percentile of 77.57 % (year 1991).
- Received ISTE Best Polytechnic Teacher award for Maharashtra Goa Section for the year 2020.

**Books Published**

1. Video Creation and Online Teaching, Kindle and paperback on Amazon, 2020.

2. Wonderful aging beyond Fifties, Kindle, and paperback on Amazon, 2021.

**Total No of Research Publications:** 9 in International / National Journals and Conference Proceedings.

**Design Patent: Dripping Plate, Design no. 311245 Dt. 22-10-2018, issued on 15-01-2020.**

**REVIEWER:**

- Reviewer of the book “Microprocessor and Interfacing”, to be published by Tata McGraw Hill 2011.
- Reviewer of the book “Digital Electronics” by Tata McGraw Hill 2010.
- Reviewed research papers for First International Conference on Digital Image Processing and Pattern Recognition DPPR-2011.
- Reviewed research papers for Third International Conference on Networks & Communications NetCoM -3.0 2011.
- Reviewed research papers for International Conference on Parallel, Distributed Computing technologies and Applications PDCTA-2011.

**PROGRAM COMMITTEE MEMBER:**

- Second International Conference on Computer Science and Information Technology CCSIT-2012.
- First International Conference on Digital Image Processing and Pattern Recognition DPPR-2011.
- Third International Conference on Networks & Communications NetCoM -3- 2011.
- International Conference on Parallel, Distributed Computing technologies and Applications PDCTA-2011.

**INVITED TALK DELIVERED / RESOURCE PERSON:**

- Resource person for Training program on “Computer awareness” for faculty members at Govt. Polytechnic Nagpur, 18<sup>th</sup> -20<sup>th</sup> Dec 1995.
- Resource person for Training program on “dBase programming” for faculty members at Govt. Polytechnic Nagpur, 8<sup>th</sup> -20<sup>th</sup> Jan 1996.
- Invited Talk on “Devnagari Character Recognition: Issues and challenges” at IETE Nagpur Centre, 14<sup>th</sup> May 2011.
- Invited Talk on “How to present Seminar effectively” at Jhulelal Institute of Technology, Nagpur, 11<sup>th</sup> Mar 2011.
- Invited Talk on “How to Select, Prepare and Present Industrial Project effectively” at Shri Datta Meghe Polytechnic, Hingana Rd, Nagpur, June 23, 2011.

- Delivered webinar on Academic Video Creation in 4 batches for faculties of various colleges in Maharashtra, during Covid 19, from 22-07-2020 to 25-07-2020.
- Delivered webinar in STTP on the Use of ICT organized by VINT Nagpur, on 16-07-2020.
- Delivered webinar on Job opportunities after HSC for students of Washim District, organized by Skill Education department Washim District, on 15-07-2020.
- Delivered webinar on Job opportunities for Electronics and Communication Engineers, organized by Priyadarshini Institute of Technology Nagpur, on 25-07-2020.
- Delivered webinar in STTP on the Use of ICT organized by K. K. Wagh Polytechnic Nashik, on 06-05-2021.
- Delivered Keynote address in STTP organized by Bapurao Deshmukh Engineering College on Pedagogy in Education, on 07-06-2021.
- Delivered webinar on Effective use of online resources and video creation for teachers of NIT Polytechnic Nagpur, on 30-09-2021.
- Delivered Webinar on Job opportunities for students of Government Polytechnic Gondia. On 31-10.2021
- Delivered webinar on Project Report Writing in the State level online workshop organized by Govt. Polytechnic Bramhapuri, on 16-04-2022.

#### **FACULTY DEVELOPMENT PROGRAMS ATTENDED:**

1. STTP on “Satellite Communication” at I.I.T. Mumbai, 14th -25th Nov 1994.
2. “Induction Program Phase- I,” G.P Nagpur, 19h June - 17 June-15h July 95.
3. Workshop on Curriculum Implementation, NITTTR Bhopal, 20th -24th Apr 1998.
4. STTP on “Micro Controller & Electric Drives”, Govt. Polytechnic, Amaravati, 14th -25th Sept. 1998.
5. “Induction Program Phase- II,” G.P. Pune, 18 Jan.-12th Feb 1999.
6. “STTP on Introduction to Computer Hardware, Peripherals, and Troubleshooting,” GRWP Yawatmal, 25th June-6th July 2001.
7. STTP on “Optic Fiber and its Applications”, TTTI Chandigarh, 16th -27th July 2001.
8. STTP on “Modern Trends in Optoelectronics”, UCP Engg. School, Berhampur, Odisha, 11th - 22nd Nov 2002.
9. STTP on “Development of Generic Skills”, Raisoni Polytechnic, Nagpur (MS), 12th to 16th Jan 2004.
10. STTP on “Wireless & Mobile Communication”, Govt. Polytechnic, Pune, 17th -28th May 2004.
11. STTP on “Introductory Course in DSP & its Applications”, Amrita Vishwa VidyaPeetham, Coimbatore, Tamilnadu, 22th Nov - 03rd Dec 2004.
12. STTP on “Mechatronics - Scope, Strategies, and Opportunities for Engineers”, Raisoni Engg. College, Nagpur (MS), 20th Jun -02th Jul 2005.
13. STTP on “Computer Hardware Maintenance”, Govt. Polytechnic, Mumbai, 9th -12th Oct 2005.
14. STTP on “Latest Trends in Advanced Communication”, Raisoni Engg. College, Nagpur (MS), 18th - 22nd Sept 2006.

15. Industrial training at Hindustan Aeronautics Limited (HAL) Nashik, 14th -18th Nov 2006.
16. STTP on “Digital Image Processing and Applications to Real-Time Systems”, Raisoni Engg. College, Nagpur (MS), 26th -31st Mar 2007.
17. Industrial Training at Rashtriya Chemicals and Fertilizers (RCF) Mumbai, 15th Nov- 4th Jan 2007.
18. Training on “Embedded Systems and VLSI Design in Robotics”, I2IT center for excellence in Robotics, I2IT Pune, 1st-30th June 2008.
19. STTP on “Embedded Systems”, Raisoni Polytechnic, Nagpur, 2nd -7th Feb 2009.
20. TEQIP training program on “Research Methodologies in Engineering and Technologies”, Govt. Polytechnic, Nagpur, 26th -28th Feb. 2009.
21. “Curriculum Detailing Workshop for the Program on Maintenance Engineering & Safety,” NITTR, Bhopal, 10-14 Aug 2009.
22. STTP on “Advanced MATLAB”, Zulelal Institute of Technology, Nagpur, 7th-11th Mar 2011.
23. STTP on “Circuit simulation and PCB design using ORCAD”, Govt. Polytechnic Nashik, 16-20 Mar 2012.
24. ISTE STTP on “Introduction to Research Methodologies”, organized by IIT Mumbai 25th June – 4 July 2012.
25. One-week “International Trainer and Assessor Course” conducted by Sydney TAFE University Australia at Mumbai, 13 – 19 Mar. 2016.
26. 3 Week equivalent STTP on “Use of ICT in Education for Online and Blended Learning”, organized by IIT Mumbai, from 02-05-2016 to 10-07-2016.
27. DTE sponsored STTP on “Outcome-based Education (OBE) Philosophy and NBA Awareness”, organized by Govt. Polytechnic Pune, 09-13 Jan. 2017.
28. Class 1 Officers Foundation training at YASHDA, Pune, 08 Nov to 19 Dec 2017.
29. DTE sponsored program on “Program outcome Attainment Methodology”, organized by Govt. Polytechnic Nagpur, 29 Jan- 02 Feb 2018.
30. AICTE ISTE STTP on “Nanotechnology: Recent Advancements and Challenges”, organized by SKIT Jaipur, 02-07 July 2018.
31. AICTE ISTE FDP on “Internet of Things: Education Canvas”, organized by SKIT Jaipur, 09-20 November 2019.

#### **LIST OF MAJOR ACTIVITIES:**

- In-charge of Curriculum Design committee for Autonomous course for Diploma in Electronics & Telecommunication Engg. at Government Polytechnic, Nagpur 1995.
- Convener, IETE Students Forum Government Polytechnic, Nagpur for the academic session 2009-10.
- In-charge HOD, Dept. of Electronics & Telecommunication at Government Polytechnic Sakoli for 11 years.
- In-charge HOD, Dept. of Electronics & Telecommunication at Government Polytechnic Gondia for 4 years.
- Officer In-charge MSBTE Theory Examination.
- Officer In-charge MSBTE Regional Assessment Centre.

- District Facilitator for the conduct of MSCIT Examination in Nagpur District (2008-2011)
- Member of the I<sup>st</sup> year admission committee.
- In-charge of II<sup>nd</sup> & III<sup>rd</sup> year admissions.
- Secretary of Students Co-operative stores.
- Member in Curriculum Development of Diploma program in “Maintenance Engineering & Safety” of Rajiv Gandhi Technical University, Bhopal, 2009.
- Co-coordinator MODROBS Project at Government Polytechnic Nagpur during 2009-2011.
- Gymkhana in-charge in Government Polytechnic Gondia and Government Polytechnic Washim.
- In-charge Principal Government Polytechnic Washim, from 09-08-2016 to 01-02-2017 and from 18-02-2018 to 20-07-2018.
- In-charge NBA in Government Polytechnic Washim.
- In-charge School-Connect in Government Polytechnic Washim.
- Officer In-charge Theory Exam as well as Library in charge in Government Polytechnic Arvi.
- Appointed as Moderator, Setter, and member of various local inquiries by College/ MSBTE/ Directorate of Technical Education Maharashtra.
- Member/Chairperson in committee for course/program/intake variation of AICTE/non-AICTE diploma programs by BTE MS.
- Core Member in Design on of Curriculum for Diploma in Mechatronics, MS BTE, Mumbai.
- Member, Program wise Board of Studies (PBOS) for development of curriculum for 3-year diploma in Mechatronics at Government Polytechnic Nagpur

#### **PROGRAMS ORGANISED:**

- Training program on “dBase programming” for faculty members at Govt. Polytechnic Nagpur, 8<sup>th</sup> -20<sup>th</sup> Jan 1996.
- 10-day residential Personality Development summer camp for school children aged between 8 to 14, at Sakai Dist. Bhandara, in 2006.
- Workshop on Robotics using microcontrollers at Govt. Polytechnic Nagpur in 2009.
- Technical inter-poly student’s breadboard circuit design, under TWIN-TECH 2011 at Govt. Polytechnic Nagpur, 30<sup>th</sup> Sept 2010.
- Training workshop on Microcontroller programming and interfacing at Govt. Polytechnic Nagpur in 2010.
- Training workshop on ORCAD Software at Govt. Polytechnic Nagpur in 2010 & 2011.
- Technical inter-poly student’s Quiz competition under TWIN-TECH 2011 at Govt. Polytechnic Nagpur, 26<sup>th</sup> Sept 2011.
- Video Creation state-level Competition for MSBTE students in 2021 at G P Washim.
- Video Creation state-level Competition for MSBTE students in 2021 at G P Arvi, in April 2022.

## **MEMBERSHIP IN PROFESSIONAL BODIES:**

- Life member of Indian Society for Technical Education, ISTE (LM 23456).
- Life Member of Institution of Electronics & Telecommunication Engineers, IETE (M-202245).

## **RESEARCH PUBLICATIONS**

### **BOOK CHAPTERS:**

1. “Segmentation of Printed Devanagari Documents,” D.C. Wyld et al. (Eds.): ACITY 2011, CCIS 198, Springer-Verlag Berlin Heidelberg, pp. 211–218, 15-17 July 2011.

### **ii) PAPERS PUBLISHED IN INTERNATIONAL AND NATIONAL JOURNALS:**

1. Vikas J. Dongre, Vijay H. Mankar, “A Review of Research on Devnagari Character Recognition,” *International Journal of Computer Applications*, (0975-8887) Vol. 12- No. 2, pp 8-15, November 2010.
2. Vikas J. Dongre, Vijay H. Mankar, “Devnagari Document Segmentation Using Histogram Approach”, *International Journal of Computer Science, Engineering and Information Technology (IJCSEIT)*, Vol.1, No.3, pp 46-53, August 2011.
3. Vikas J. Dongre, Vijay H. Mankar, “Development of Comprehensive Devnagari Numeral and Character Database for Offline Handwritten Character Recognition”, Hindawi Publishing Corporation, *Journal on Applied Computational Intelligence and Soft Computing*, DOI: 10.1155/2012/871834 Volume 2012.
4. Vikas J. Dongre, Ramkrishna V. Yenkar, Vijay H. Mankar, “Interactive Learning through Hands-on Practice using Electronic Mini – Lab (EML): a Case Study”, *Journal of engineering, science, and management education(JESME)*, Vol. 5 pp 357-362, Jan-Mar 2012.
5. Vikas J. Dongre, Vijay H. Mankar, “Devanagari Handwritten Numeral Recognition using Geometric Features and Statistical combination Classifier”, *International Journal on Computer Science and Engineering (IJCSE)*, Vol. 5 No.10, PP. 856-863, Oct 2013.
6. Vikas J. Dongre, Ramkrishna V. Yenkar, Vijay H. Mankar, “Innovative Improvements in Electronics Engineering Laboratory Education using Electronics Mini Lab (EML)”, *ISTE Journal of Technical Education* vol 37, July- Sept 2014

### **iii) PAPERS PUBLISHED IN INTERNATIONAL AND NATIONAL CONFERENCES /SEMINARS:**

1. Vikas J Dongre, Vijay H Mankar, “Electronic Mini-Lab (EML): A Boon for Skill based Electronic Engineering Education,” in *International Conference on Education Informatics, EduMatics-2010*, May 22-23, 2010.
2. Vikas J Dongre, Vijay H Mankar, “Segmentation of Devanagari Documents”, *1st International Conference, ACITY* Chennai, India, pp 211-218, 15-17 July 2011.
3. Vikas J. Dongre, Vijay H. Mankar, “Devanagari Offline Handwritten Numeral and Character Recognition using Multiple Features and Neural Network Classifier”, *2nd International Conference on Computing for Sustainable Global Development (INDIACom)*, 2015, pp. 425-431.

**(Dr. Vikas J. Dongre)**