



Dr. Krishna K. Warhade

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Educational Qualification

□ Ph. D

Institute: Indian Institute of
Technology (IIT) Bombay,
Mumbai, India,

Specialization : Communications
and Signal Processing

Duration: Jan 2006 to Nov 2010,
Year of Passing: Nov 2010

Title of Thesis: Video shot
boundary detection

Ph.D Advisor: Prof. S. N.
Merchant

□ M. E. (Instrumentation)

Institute: Shri Guru Gobind
Singhji Institute of Engg. & Tech.,
Nanded,

University: Swami Ramanand
Teerth Marathwada University,
Nanded, Year of Passing: Dec
1999, Passed in First class with
Distinction

□ B. E. (Electronics)

Institute: Shri Guru Gobind
Singhji Institute of Engg. & Tech.,
Nanded, India.

University: Dr. Babasaheb
Ambedkar Marathwada
University, Aurangabad, Year of

Teaching Experience (23 + years.)

Current Academic and Administrative Responsibilities

1. Designation : **Dean Research Development, Innovation and Consultancy**, Dr. Vishwanath Karad MIT World Peace University, Pune, India
Duration: 08 October 2018 to till date
2. Designation: **Head IT Department**, MIT College of Engineering, Pune.
Duration : 01 Aug 2018 to till date
3. Designation: **PhD Research Center Coordinator**, for Electronics and Telecommunication Dept. Research center at MIT College of Engineering.
Duration: Academic year 2015-16 to 21 Aug 2019.
4. Member IQAC (Internal Quality Assurance Cell), Dr. Vishwanath Karad MIT World Peace University.
5. **Remote Center Coordinator for MHRD-IIT Bombay, National Mission on Education through ICT.**
6. **SPOC Smart India Hackathon**, Dr. Vishwanath Karad MIT World Peace University, Pune (Nine groups from MITWPU won first prize in SIH 2019, Nine groups won prizes in 2018 and 2017)
7. **Convener for VIP Protocol and Liaisoning Committee**, Bhartiya Chatra Sansad and National Teacher Congress.
8. **Vice President and Convener, MHRD Institution's Innovation Council**, Dr. Vishwanath Karad MIT World Peace University, Pune
9. **SPOC and Project Coordinator** for collaboration between **MITWPU, Leadingindia.ai and Bennett University**

Teaching Experience :

23 + years with 9 years as a Professor.

7+ years in MAER'S Group

(Including MITCOE and MITWPU)

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- Current Designation: Professor

Duration: 01.07.2017 to till date

School of Electronics and Communication Engineering

Dr. Vishwanath Karad MIT World Peace University, Pune,

- Designation: Professor

Passing: Aug 1995, Passed in First class

Major Subjects Taught to B. Tech and M. Tech students

Continuous time signals and systems, Discrete time signals and systems, Digital signal processing, Digital filter design, Biomedical signals and systems, Image processing, Joint Time frequency analysis, wavelet transform, Embedded Product Design, Research Methodology, Embedded Signal Processing, Business Management, Image processing and computer vision.

Subjects taught in AY 18-19

(i) **Research Methodology**, M. Tech trimester I, (VES and CNS , school of ECE)

(ii) **Embedded Signal Processing**, M. Tech trimester II (VLSI and Embedded system, school of ECE)

(iii) **Image Processing and Computer Vision**, M.Tech trimester III (VLSI and Embedded system, school of ECE)

(iv) **Research Methodology** , **PhD Course work**, Faculty of Engineering.

Research Interest

Healthcare, Video Segmentation, Wavelets, Digital Signal Processing, Digital Image Processing, Digital Filter Design, ICT in Agriculture.

Ph.D. Supervisor

MIT World Peace University , Pune , Guiding 02 students

Gujarat Technology University, Ahmedabad, Guiding 02 students

M. Tech Project Guidance

Guided 20 M. Tech students
Currently guiding 01 student

Duration: 01.01.2013 to 30.06.2017

Electronics and Telecommunication Engineering Department,
MIT College of Engineering, Kothrud, Pune.

□ Designation: Professor

Duration: 21.06.2011 to 31.12.2012

Electronics Dept., Lokmanya Tilak College of Engineering,
Navi Mumbai.

□ Designation: Assistant Professor

Duration: 03.02.2004 to 20.06.2011

Electronics Dept., Lokmanya Tilak College of
Engineering, Navi Mumbai.

□ Designation: Lecturer

Duration: 13.08.1998 to 02.02.2004

Electronics Dept., Lokmanya Tilak College of Engineering,
Navi Mumbai.

□ Designation: Lecturer

Duration: 02.09.1995 to 25.07.1997

Electronics Dept., Terna, Navi-Mumbai.

Academic and Administrative Responsibilities handled at MITCOE and MITWPU

□ **Dean Second Shift, MITCOE** from 12.06.2017 to 31 July 2018

□ **Dean R&D, MITCOE** from 12.06.2015 to 11.06.2017.

□ **Core Committee Member for Smart India Hackathon 2017** from MIT Group of Institutions organized by MHRD, AICTE and Persistent (MIT Group won nine awards in various ministry categories).

□ **SPOC for Smart India Hackathon in year 2017, 2018 from MITCOE and from MITWPU in year 2019.**

□ **Initiated spoken tutorial activities** (MHRD-IIT Bombay Initiative) at MITCOE, **Spoken Tutorial Coordinator for MITCOE** from 2013 to 2017.

□ **Nodal officer for MHRD-AICTE-BSNL, Employability Enhancement Training Programme.** Two batches are trained for Silver, Golden and Platinum training (Each of 6 months duration), 2014-2016

Conference Organized

Organized **National Conference** on Recent Trends in Electronics Telecommunication and Information Technology “NCRTEIT ” 22-23 Dec 2015 at MITCOE as a **General Chair**, Technically sponsored by CSI and IETE

STTP/Workshop Organized

(i) Convener for IEEE sponsored STTP on “Emerging Research Trends in Electronics, telecommunication and allied fields” during 8-12 Dec 2014, Technically Sponsored by IEEE Communication Society Pune Chapter and Renu Electronics Pune.

(ii) Co-Convener for IEEE SPS Winter workshop on “ Advances in Machine Learning and Visual Analytics for Forensic and Security Applications”, from 10-14 Dec 2018 at MITWPU, Pune

(iii) Convener for three days workshop on, “Artificial intelligence and Deep learning” organized in collaboration with leadingindia.ai, NVIDIA and Bennett University , Noida in

Workshop organized as a Remote Center Coordinator for MHRD-IIT Bombay, National Mission on Education through ICT for faculties

(i) AICTE approved FDP on “Foundation Program in ICT for Education (FDP101x) from 13 Sept 2018 to 18 Oct 2018

(ii) AICTE approved FDP on “Pedagogy for Online and Blended Teaching Learning Process (FDP201x) from 25 Oct 2018 to 29 Nov 2018.

- **Convener for VIP Protocol and Liasoning Committee**, Bhartiya Chatra Sansad since 2016, National Teacher Congress 2017 and 2018, Sarpanch Parishad 2017
- **Jointly coordinated PhD program (Engineering), MITWPU** during AY 2017-18

Responsibilities handled at LTCE, Navi-Mumbai

- **Head of Electronics Department** from Mar 2009 to 31 Dec 2012.
- **LTCE and Konkan Railway Corporation limited (KRCL)** Collaborative Project. Role in the collaborative project:
Coordinator of the project from 01.04.2009 to Dec 2012.
In-charge software group from 02.03.2005 to 01.03.2009.

PUBLICATIONS

International Journals	:	25
Book	:	01
Book Chapter	:	01
International Conference	:	14
National Conference	:	13

Publication in SCI Journal

- K. K. Warhade, S. N. Merchant and U. B. Desai, “Effective algorithm for detecting various wipe patterns and discriminating wipe from object and camera motion”, IET Image Processing Journal, vol. 4, no. 6, pp. 429-442, 2010
- K. K. Warhade, S. N. Merchant and U. B. Desai, “Shot boundary detection in the presence of fire flicker and explosion using stationary wavelet transform”, Springer, Signal Image and Video Processing Journal, vol.4, no.4, pp. 507-515, 2011
- K. K. Warhade, S. N. Merchant and U. B. Desai, “Performance evaluation of shot boundary detection metrics in the presence of object and camera motion”, IETE Journal of Research, vol. 57, no. 5, pp. 456-461, 2011
- K. K. Warhade, S. N. Merchant and U. B. Desai, “Shot boundary detection in the presence of illumination and

(iii) One Day Workshop on "Moodle Learning Management System" on 15th March 2019.

iv) One day workshop on "Scilab" on 04 May 2019.

v) One day workshop on "Python" on 22nd June 2019.

vi) One day workshop on "e-sim" on 21 Sep 2019.

vii) One day workshop on "R" on 09 Nov 2019.

viii) One day workshop on "Arduino" on 08 Feb 2020.

viii) One day workshop on "C/C++" on 29 Feb 2020.

Workshop Organized for students

Workshops organized under **National Mission on Education through ICT, Government of India (MHRD) and IIT Bombay Spoken Tutorial as a Coordinator Workshop : 08**

Areas : C and C++, Python, Latex, Linux, Scilab, Libre office

Other Workshop organized for faculties

i) One day workshop on Patent copyright and IPR for MITCOE faculties by Dr. S. Radhakrishnan (Director R&D and Innovation MIT) and Mr. Anand Mahurkar (Patent Lawyer, Krishna and Saurastri associates Pune) on 7th Feb 2014 - Total 48 faculties participated in the workshop

ii) One day workshop on Latex for MITCOE faculties by Prof. S. S. Shitole, Research Scholar IIT Bombay on 27th Feb 2014- Total 30 faculties participated in the workshop

motion", Springer, Signal Image and Video Processing Journal, vol.7, no.3, pp. 581-592, 2013

Book Published

Book Title : "Video Shot Boundary Detection"

Author : K. K. Warhade, Prof. S. N. Merchant (Professor, IIT Bombay), Prof. U. B. Desai (Director, IIT Hyderabad)

Publisher : River International Publisher, Denmark 2011, ISBN : 978-87-92329-71-4

Book Chapter Published

Book Title : "Research Methodology, A Practical and Scientific Approach"

Book Chapter : Presenting and publishing the research findings

Authors : K. K. Warhade, V. Bairagi, J. Jayanth
Publisher : Chapman and Hall, CRC press, Taylor and Francis, Published Feb 4, 2019
ISBN: 9780815385615

R&D and Consultancy Projects completed

- Worked on collaborative project "Intelligent Health Monitoring System for The Point Machine" between LTCE and Konkan Railway Corporation limited (KRCL). Field prototype submitted to Konkan Railway at Kankavali station.
Role in the collaborative project:
 - 1) Coordinator of the project from 01.04.2009 to Dec 2012
 - 2) Incharge software group from 02.03.2005 to 01.03.2009.
- Successfully completed proof of concept for the project, "Finding Missing Children" technically sponsored by Blackberry and MIT. Role in the project: Incharge Image processing group.
- Mentored a team for the development of Mobile app to display real time Air Quality Index for MITWPU Air Quality

(iii) One day Learning development workshop on “IOT and Data Analytics in Education” on 26th July 2019, Speaker: Dr. Ajay Deshmukh

Project Competition Organized

Organized the TE Mini Project Competition MITCOExcellence 2013 on 8th Apr 2013 and 9th Apr 2015 as a coordinator.

Resource Person and Conference Reviewer

(i) As a Resource Person in STTP and Workshops : 20 Events

(ii) Conference Reviewer and session chair : 12 Conferences

Mentor for Innovative project competition

(i) Student project shortlisted for presentation at India Innovation Competition organized by DST, CII and AICTE, out of 350 total teams, 64 teams were shortlisted for final presentation in Delhi.

(ii) Student project shortlisted in Kalpana Prototype making competition organized by IIT Bombay and Tata Center for technology and design. Students made prototype at Tata center, IIT Bombay.

Personal Details

Date of Birth : 27.07.1973
Marital Status : Married
Nationality : Indian
Aadhaar : 2936 5001 4872

Reference

1. Dr. S. N. Merchant, Professor, Electrical Engineering, Department, IIT Bombay.

Station and the same information is transmitted to SAFAR app launched by the Ministry of Earth Science, Govt. of India.

□ Mentoring a team of students for Campus Carbon Footprint App to be developed for Smart Campus Cloud Network (SCCN) and TERRE policy center.

□ Worked on IIT Bombay-BARC (BHABHA Atomic Research Centre, Mumbai) collaborative project in biomedical area for six month as a part of PhD course work.

Proposals submitted to funding agencies

1. Proposal submitted to Atal Community Innovation Center, NITI Aayog as an Authority Person. Fund applied 5 Crore (PPP Model).
2. Proposal to MeitY (The Ministry of Electronics and Information Technology) for Startup Hub application scheme Technology Incubation and Development of Entrepreneurs (TIDE 2.0) as a Member. Funds applied 2.5 Crore.
3. Proposal Titled “Design & development of easily portable Electronic detection system for monitoring field soil nutrients” **submitted to Rajiv Gandhi Science & Technology Commission, Government of Maharashtra**, as a Principal Investigator. *Project Reference Number: RGSTC/PPP-631/2014, Funding: 20.9 Lakh, (Presented to committee, revised budget submitted in Apr 2017 as per suggestion from RGSTC Secretary), Funding not received.*
4. Proposal titled “Design and development of affordable system for Rheumatoid arthritis”, submitted to **Indian Council of Medical Research (ICMR)**, as a Principal Investigator. Pre-proposal accepted with reference number 2015-0438, **Proposal is accepted for final presentation and presented to committee through Skype. Proposal not sanctioned.**
5. Proposal titled “Throughput Improvement in 5G cognitive Communications using USRP”, submitted to **DST AMT Program in 2017**, Funding: 16.30 Lakh as a Principal Investigator **(Cleared first stage , rejected in final stage)**

2. Dr. U. B. Desai, Director IIT Hyderabad.
6. Proposal titled “System/Model Implementation and integration for rural maternal treatment practices, using ICT based technology powered by Internet of Things”, submitted to **DST AMT Program in 2017** as a Principal Investigator, Funding: 12 Lakh (**Cleared first stage, rejected in final stage**)
7. Detection and classification of epileptic seizures using cognitive learning techniques and real time analysis on embedded platform, submitted to DST, Cognitive science research initiative program KIRAN, 14.65 Lakh, as a Principal Investigator (**Submitted in June 2017, proposal rejected in second stage**)

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Enclosed:

Detail List of Publications, Workshops organized, Expert Talks, Session chaired and Papers reviewed in Conference