



Dr. Prashant Vasant Rao Kasambe
Assistant Professor, Programme Coordinator
Electronics Engineering Department
Sardar Patel Institute of Technology
Munshi Nagar, Andheri (W), Mumbai-400058

<i>Personal Details</i>			
Date of Birth	26th June 1976	Sex	M
Address	B/702, Mamta Sankalpa Sahaniwas, NNP-4, Goregaon(E), Mumbai –65.	Contact No.	9867776871
Email Id	prashnat_kasambe@spit.ac.in		
Languages	Marathi, English, Hindi	Status	Married

<i>Qualification</i>				
Examination	Board/University	Year	Percentage of Marks/class	
Ph.D. (Electronics)	Mumbai	July 2022	--	
M.E.(Electronics)	Mumbai	2005-2007	70.00 %	I st with Distinction
B.E. (Electronics & Telecommunication)	Amravati	July 1997	67.57 %	First
12 th	Amravati	March 1993	78.50 %	I st with Distinction
10 th	Nagpur	March 1991	86.57 %	I st with Distinction

- Date of joining the present institute: 1st January 2002
- Date of joining the present department: 1st January 2002
- Teaching experience: 22 Years

<i>Awards</i>
➤ Best teacher award during Annual Function of the Institute in AY 2016-17 by Cognizant Pvt. Ltd., Mumbai on the basis of merits set by the Institute and the authorities at Cognizant Pvt. Ltd., Mumbai.

<i>Areas of interest/Domain Expertise</i>
1) Biomedical Instrumentation
2) Process Control and Instrumentation
3) Image Processing
4) Optimization Algorithms
5) MEMS Sensor Design

Computer skills**Languages** : C, C++**OS** : Windows, Linux**Software** : MATLAB, LABVIEW, CAD tools for circuit design like PSPICE, Multisim, CAD tools for VLSI Design like Cadence, FEM tools like CoventorWare for MEMS design, COMSOL, Latex Technical Documentation Language**Research Publications**

National Conferences: 05

International conferences: 10

International Journals: 19

Patents

Indian Patents Published: 05

Sponsored Research Projects and grants

- Received total amount of Rs. 4,83,333/- from apex bodies like AICTE, New Delhi, University of Mumbai till July 2022.
- 04 Projects successfully completed with in kind sponsorship from Industry

Research guidance

- 02 M. Tech students

Co-Curricular, Extension and Professional Development Related Activities

Sr. No.	Nature of Activity	Details
1	Student related co-curricular, extension and field based activities (such as extension work through NSS, NCC and other channels, cultural activities, subject related events, advisement and counseling)	<ol style="list-style-type: none"> 1. Conducted Trouble Shooting Competition for Electronics and Electronics & Telecommunication students successfully consecutively since Academic year 2015-16. The outcome of this competition is very strongly mapped to one of the outcomes of Department. This event has become very popular among the students and treated as one of the best practices of Department. 2. Faculty mentor for Technical event during Oculus 2021 an Innovatron 2019. Responsibility includes assisting students in grabbing the sponsorship from industries, to design problem statement and Judge. 3. Faculty coordinator for AICTE sponsored Scheme for Promoting Interests, Creativity & Ethics among Students (SPICES) for year 2022-2023. 4. Organizing committee of ICCICT2021 as a host for Technical session 5. Chairperson and Committee member of Syllabus setting team for autonomous syllabus of S.P.I.T. and University of Mumbai.

2	Contribution to Corporate life and management of the department and institution through participation in academic and administrative committees and responsibilities.	<ol style="list-style-type: none"> 1. Programme coordinator contributed data collection, organization, and analysis for apex bodies like NBA, NIRF, NAAC, AICTE, and Mumbai University. 2. IQAC Member and NAAC Criteria 4 Institute level coordinator from May 2022. 2. Laboratory In-charge. 3. Organizing Committee member during AICTE sponsored STTPs and FDPs. 4. Institute level Coordinator for CEP Module: Responsibility includes coordinating the assessment activities for each Department. Setting of the question paper on MOODLE, Mentoring students for GATE preparation. 5. Team member of one of the most important OBE Modules of ERP supplied by JUNO Pvt Ltd. Pune. Contribution includes brainstorming, preparation, submission, and discussion of SOP OBE Module JUNO ERP with representative from JUNO Pvt. Ltd. 6. Content creation for First Year Admission to S.P.I.T. (Videos/ Documents /Admission Prospectus and Flyer etc.) for Electronics Department during 2020-21. 7. First Year Admission to S.P.I.T. during 2021-22 for Admission round team
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Workshops/Refresher courses/Training programs/Seminars

Attended:

Less than one week FDP/Workshop/Seminars/summit: 31

AICTE/ISTE/TEQIP sponsored/approved One Week STTP/FDP: 07

AICTE/ISTE/TEQIP sponsored/approved One Week STTP/FDP: 09

Conducted/Resource Person:

Less than one week FDP/Workshop/Seminars/summit conducted: 11

Less than one week FDP/Workshop/Seminars/summit as a Resource Person: 06

Books Published/Reviewed

- Reviewed a Script on “Electrical Measurements”, McGraw Hill Education (India) Pvt. Ltd. in year 2008-09.
- Reviewed a Script on “Control Systems”, Pearson Education, published by Dorling Kindersley (India) Pvt. Ltd. in year 2010-11.

Interaction with outside world

- Resource person of FDPs/STTPs/Workshop for students/faculty
- External Examiner, judge for Projects competitions at colleges such as S.P.C.E., Fr CRCE COE, KJS COE, Mumbai, etc.
- SP-TBI's Prayas-Faculty Monitoring and Mentoring Committee
- Invited Reviewer for several reputed international conferences like IBSSC-2021, IBSSC-2019, ICCICT2018, etc.

Membership of Professional Bodies

- Life Member of Institution of Electronics and Telecommunication Engineers (IETE)
- Life Member of Indian Society of Technical Education (ISTE)

Employer	Duration	Subjects taught
Shri.Bhagubhai Mafatlal Ploytechnic, Vile-Parle (W), Mumbai-56	17/07/2000 to 31/10/2001 (Adhoc)	Industrial Electronics, Principles of Analog Techniques Principles of Control Systems
Bhartiya Vidya Bhavan's, Sardar Patel Institute of Technology, Munshi Nagar, Andheri(W), Mumbai-58	01/01/2002 till date	B.E.-Robotics & Automation, Mechatronics, Instrumentation Systems, , Integrated Circuits Technology, MEMS Technology, Advanced VLSI Design T.E.- Linear Integrated Circuits & Design, Electronics Instrumentation System S.E.-Electronic Measuring Instruments, Electrical Machines and Instruments, Electronics Devices and Circuits, Electronics-I, Control Systems

Courses/Workshop Attended

- 1) One Week Course on "Digital Image Processing and its Applications" organized by M S Ramaiah School of Advanced Studies, Bangalore, during 24th Nov to 29th Nov 2003.
- 2) Two Weeks Refresher Course on "Modern Perspective in Communication and Interpersonal Skills" approved by Director of Technical Education, Mumbai, during 9th June to 21st June 2003.
- 3) Two Days Workshop on "Computer Hardware" organized by Department of Electronics Engineering, Andheri (W), Mumbai-58, during 17th Nov & 18th Nov 2003.
- 4) Two Days Course on "Mechatronics" organized by Department of Electronics Engineering, FR. C.R. College of Engg., Bandra (W), Mumbai-50, on 4th Feb & 5th Feb 2005.

- 5) Two Days workshop on “Advances In Processor Architecture” organized by Department of Electronics Engineering, S. B. M. Polytechnic, Vile-Parle (W), Mumbai-56, on 17th March 2007.
- 6) One Day workshop on “Circuit Simulation” organized by Department of Electronics Engineering, Sardar Patel Institute of Technology, Andheri (W), Mumbai-58, on 28th Aug 2008.
- 7) Two Days CEP Course on “Introduction to Robotics” conducted by IIT Bombay, during 23rd - 24th April 2010 at IIT Bombay.
- 8) Two Days workshop on “DSP Design Flow” organized by CoreEL Technologies & Department of Electronics Engineering, Sardar Patel Institute of Technology, Andheri (W), Mumbai-58, on 6th & 7th Jan 2011.
- 9) Two Days CEP Course on “Introduction to Robotics” conducted by IIT Bombay, during 14th & 15th Jul 2011 at Rajiv Gandhi College of Engg, Andheri, Mumbai.
- 10) Two Days Workshop on “Technical Paper Writing” conducted by Department of Electronics Engineering, Sardar Patel Institute of Technology, Andheri (W), Mumbai-58, on 21st & 22nd July 2011.
- 11) Two Days Workshop on “Analog System Design-Educators’ Workshop” conducted by Texas Instruments, Tech Park, Bangalore under India University Programme during on 27th & 28th January 2013.
- 12) Short Term Course on VLSI Design (STCVD-II, 2013) conducted by Department of Electronics and Telecommunication Department, MANIT, Bhopal, M.P. under TEQIP-II 26th Dec to 28th Dec 2013.
- 13) Short Term Fast Track course on “Verilog & Basic System Verilog Assertions” conducted by Department of Electronics and Instrumentation Department, Shri. G. S. Institute of Technology and Science, Indore, M.P. from 1st Feb to 12th Feb 2014.
- 14) Participated in “Engineering and Science Innovation Summit” sponsored by AI Instruments Pvt. Ltd., Mumbai in association with National Instruments on 21st August 2014.
- 15) Two days Hands-on workshop on “Embedded System Design Flow using Vivado” conducted by CoreEL Technologies (I) Pvt. Ltd. And Electronics Engineering Department, V.J.T.I., Mumbai, from 10th and 11th December 2014.
- 16) Two days workshop (under Faculty Development Programme) on “Challenges on VLSI Design” conducted by Electronics Engineering Department, Fr. Agnel College of Engineering, Bandra (West), Mumbai from 13th March 2015 to 14th March 2015.
- 17) One Day Tutorial on “Wavelet Theory” conducted by International Conference on Communication, Information and Computing Technology (ICCICT -2015), Sardar Patel Institute of Technology, Andheri (W), Mumbai-58, on 15th Jan 2015.

- 18) One Day MEMS Conference on MEMS Design to Manufacturing jointly organized by FTD Infocom Pvt. Ltd. and Coventor inc. on 15th Feb 2017 at Bangalore, India.
- 19) Two day workshop on “ Innovative Research in Pedagogy with Mini-MOOC Blended with Instruction Strategies to Enhance Quality in Higher Education” organized by Fr. C. R. C. E., Mumbai in association with Thapar University, Patiyala on 7th and 8th July 2017.
- 20) One day workshop on “Awareness about Accreditation” under “Share and Mentor Institutions (Margadarshan) Scheme of AICTE” conducted by V.J.T.I., Mumbai on 28th July 2017.
- 21) One day Pre conference Tutorial on “Design for IoT” organized at Fr. C. R. C. E., Mumbai in on 29th Nov 2017.
- 22) One day Faculty Development Programme on “Innovative Teaching Methodologies and Application of Emotional Intelligence in Education” conducted by Myster MyLife Education Pvt. Ltd. Partner Institute of University of Mumbai's Garware Institute of Career Education & Development (GICED), Mumbai on 10th Feb 2018.
- 23) Two days Research Symposium 2019 on “Recent Trends in Engineering and Industry 4.0” SPCE under Twinning Activity of TEQIP on 6-7th May 2019.
- 24) One day workshop on “Webinar on “Indian Patent Filing and International patent filing procedure - Do's and Dont's” conducted by Brainiac IP solution on 13/4/2020.
- 25) One day workshop on “Webinar no “Trademark filing (Indian and International), Copyright filing procedure and Trade Secret- Do's and Dont's” conducted by Brainiac IP solution on 22/4/2020.
- 26) One day workshop on “InPods Demo “Accreditation Management System” conducted by InPods on 2/6/2020.
- 27) One day workshop on “Online Teaching Learning and Online Assessment” conducted by InPods on 4/6/2020.
- 28) One day Webinar Attended on “Multiphysics Analysis for Medical Devices Using COMSOL” by COMSOL on 25/6/2020.
- 29) One day workshop on “Modelling MEMS Devices with COMSOL Multiphysics” conducted by COMSOL on 24/8/2020.
- 30) Participated in Industry sponsored Tutorial on “RPA with Alteryx-Python” on 25th June 2021 during the 4th IEEE International conference on Communication, Information and Computing Technology (ICCICT-2021) organized by Sardar Patel Institute of Technology, Mumbai.
- 31) Two day online National Level workshop "Transformation through NAAC ACCREDITATION PROCESS for Higher Educational Institutions & Health Science Institutions" held on 20th &

21st June 2022 conducted by "Institute for Academic Excellence, Hyderabad in collaboration with Collegiate Education & Technical Education Department, Telangana State.

<i>ISTE-STTP/ TEQIP Sponsored Courses Attended</i>

- 1) Two Weeks ISTE-STTP on “DSP and its Applications” organized by Department of Electrical and Electronics Engineering, Sardar Patel College of Engg., Andheri(W),Mumbai-58, during 9th May to 20th May 2005.
- 2) Two Weeks ISTE-STTP on “Signal Processing and Communication Engineering” organized by Department of Electronics Engineering, D. J. Sanghavi College of Engg., Vile-Parle (W),Mumbai-56, during 10th Dec to 20th Dec 2007.
- 3) Two Weeks ISTE-STTP on “Mastering Matlab” organized by Department of Electronics Engineering, Datta Meghe College of Engg.,Airoli, Navi-Mumbai, during 1st Jan to 10th Jan 2008.
- 4) Two Weeks ISTE-STTP on “Software Tools in Electronics and Telecommunication Engineering” organized by Department of Electronics and Telecommunication Engineering, Rajiv Gandhi College of Engg, Andheri, Mumbai, during 15th Dec to 19th Dec 2008.
- 5) One Week ISTE approved Mission10X Workshop organized by WIPRO, conducted at Sardar Patel Institute of Technology, Andheri(W), Mumbai-58, during 24th Nov to 26th Nov 2008 & 9th Dec to 10th Dec 2008.
- 6) Two Weeks Graded ISTE-STTP on “Computer Communication Networks with Lab Exercises” organized by Sardar Patel Institute of Technology, Andheri (W), Mumbai, during 21st November to 2nd December 2011.
- 7) Two Weeks ISTE Workshop on “Introduction to Research Methodologies” conducted by Indian Institute of Technology, Bombay, from 25th June to 04th July 2012.
- 8) One Week Short Term Training Programme TEQIP –II Sponsored on “Fundamentals and Applications of Wireless Communication” conducted by Department of Electronics and Telecommunication Department, Shri. G. S. Institute of Technology and Science, Indore, M.P. from 27th Jan to 31st Jan 2014 2014.
- 9) One Week STTP ISTE approved on “Micro-Electro-Mechanical-Systems (MEMS)” conducted by Ramdeobaba College of Engineering and Management, Nagpur, from 20th April to 25th April 2015.
- 10) One Week INUP (A project by DeitY, MCIT, Govt. of India at IIT Bombay and IISc, Bangalore) Hands-on Training Workshop on “Fabrication of MEMS Devices, conducted by CEN, IIT, Bombay, from 11th April to 15th April 2015.

- 11) Two Weeks AICTE Funded Faculty Development Program on “Electronic System Design: From Devices to Applications” conducted by Sardar Patel Institute of Technology, Andheri, Mumbai, from 4th May to 15th May 2015.
- 12) One Week STTP under GIAN (Global Initiative of Academic Network) (MHRD) on “MEMS Resonators-Fundamentals and Applications” conducted by Indian Institute of Technology, Mumbai, from 27th June 2016 to 3rd July 2016.
- 13) One Semester Course on “Bio Sensors and Bio MEMS (EE-625)” (PG Level Part time Programme) conducted by Department of Electrical Engineering, Indian Institute of Technology, Mumbai under Continuing Education and Quality Improvement Programme, during January-April 2016.
- 14) Two Weeks ISTE-STTP under National Mission on Education through ICT (MHRD) on “CMOS, Mixed Signal and Radio Frequency VLSI Design” conducted by Indian Institute of Technology, Khargpur, (Remote centre: Sardar Patel Institute of Technology, Andheri, Mumbai), from 26th December 2016 to 4th Feb 2017.
- 15) Two Weeks AICTE Sponsored Two Week FDP on “Consumer Electronic Product Design, Testing, Reliability and Patenting” organized by Department of Electronics Engineering, Sardar Patel Institute of Technology, Munshi Nagar, Andheri (W), Mumbai 400 058, from 1st July 2019 to 13th July 2019.
- 16) One Week FDP on “Entrepreneurship Development in Academic Campus” organized by Sardar Patel Technology Business Incubator, Andheri, Mumbai from 20th - 24th June 2022.

<i>Workshop/Courses Conducted</i>
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- 1) Conducted One Day Workshop on “LabVIEW” for IEEE student’s branch S.P.I.T., July 2007.
- 2) Conducted One Day Workshop on “LabVIEW” for IEEE student’s branch S.P.I.T., 15th Aug 2008.
- 3) Conducted One Day Workshop on “LabVIEW” for student of Electrical Engineering Dept. S.P.C.E. in 2008.
- 4) Member of the organizing committee for One Day workshop on “Circuit Simulation” organized by Department of Electronics Engineering, Sardar Patel Institute of Technology, Andheri (W), Mumbai-58, on 28th Aug 2008.
- 5) Member of the organizing committee for Two Days workshop on “Design with 8051 Microcontroller (Mechatronics)” organized by Department of Mechanical engineering Dept, S.P.C.E. & Electronics Engineering Dept, S.P.I.T., Andheri (W), Mumbai-58, on 19th – 20th Mar 2010.

- 6) Conducted Two Days Workshop on “PLC Programming” for students of S.P.C.E. & S.P.I.T. on 24th- 27th March, 1st -2nd April & 14th -17th April 2010.
- 7) Seminar conducted on “Input Output Modules and Special Purpose Modules for PLC” for B.E. Electrical students on behalf of EESA on 7th April 2010.
- 8) Conducted Two Days Workshop on “PLC Programming” for students of S.P.C.E. & S.P.I.T. on 1st & 8th Oct 2011.
- 9) Seminar conducted on “CRO, DSO (Electronics Tools)” for First year students of S.P.I.T. on behalf of IETE-SPIT on 29th Sept 2011.
- 10) Conducted Two Days Workshop on “Matlab Programming” for teaching faculty of all branches at Saboo Siddik College of Engineering, Byculla, Mumbai on 20th & 21st Jan 2012.
- 11) Conducted Two Days Workshop on “PLC Programming” for students of S.P.C.E. & S.P.I.T. on 28th & 29th Oct 2013.
- 12) Expert talk on Matlab for the students of Mechanical Engineering Students under MESA at Mechanical Engineering Department, S.P.C.E., Andheri (W), Mumbai on 22nd Oct 2015.
- 13) Conducted Two Day Workshop on “Labview Programming” for students of Electrical Engineering Department, S.P.C.E on 18th & 19th Dec 2015 under TEQIP Programme.
- 14) Delivered a talk on “Sharing Experiences of Department of Electronics Engineering, S.P.I.T. during Evaluation by NBA Committee Experts 2016” at One day workshop on “Awareness about Accreditation” under “Share and Mentor Institutions (Margadarshan) Scheme of AICTE” conducted by V.J.T.I., Mumbai on 28th July 2017.
- 15) Delivered a Guest lecture on "Role of LabVIEW in Specific Aspects of Engineering" for Faculty and students across various disciplines at K. J. Somaiya College of Engineering, Vidyaihar, Mumbai on 4th April 2018.
- 16) Delivered Lecture on “Virtual Lab” on 25th Feb 2019 at Two Day Workshop on Active Teaching Learning Strategies Using Innovative Technology at D.J. Sanghavi College of Engineering, Mumbai on 25th Feb and 26th Feb 2019.
- 17) Resource person during Online STTP on LabVIEW Programming and its application during 27th Aug 2020 to 29th Aug 2020 at Deogiri Institute of Engineering & Management Studies, Aurangabad, Maharashtra.

Papers Published/Presented

At International Journals:

- 1) Naik, Sanskruti, Rai, Rini, Sankhe, Nimisha, Kasambe, P. V., "Automatic Anterior Chamber Angle Assessment of Ultrasound Images For Glaucoma Detection," Proceedings of the International Journal of Engineering Research & Technology (ISSN: 2278-0181) Vol. 2 Issue 4, April-2013.
- 2) Pooja, A. B., Nupur, D. K., Prashant, V. K., "Analyzing Performance of VHDL AMS for Switch Level Modeling and Simulation," Proceedings of the International Journal of Scientific Engineering & Technology (ISSN: 2277-1581), Vol. 2 Issue 5, May-2013.
- 3) Badnikar, S. A., Vengurlekar, A., Kasambe, P., "Electrical Performance Optimization of MOSFETs Using Multiobjective Genetic Algorithms," Proceedings of the International Journal of Latest Trends in Engineering & Technology (ISSN: 2278-621X), Vol. 2 Issue 2, March-2013.
- 4) Pal, A., Kasambe, P. V., "Performance Evaluation of Evolutionary Algorithms for Digital Filter Design," Proceedings of the International Journal of Scientific Engineering and Technology (ISSN: 2277-1581), Vol. 2 Issue 5, pp. 398-403, May 2013.
- 5) Karan S. Shah , Samiksha R. Gupta , Gauri M. Dalvi , Surendra S. Rathod , Prashant V. Kasambe, "Performance Analysis Of MEMS Microheater By Optimizing Coil Design Using Coventorware," Proceedings of the International Journal of Journal of Research in Engineering and Applied Sciences (JREAS), Vol. 1, Issue 03, pp. 135-140, July 2016.
- 6) Sumit B. Jadhav, S. S. Rathod, P. V. Kasambe, "Data Driven Control Topology for Industrial Process using PLC," Proceedings of the International Journal of Innovative and Emerging Research in Engineering, Vol. 3, Special Issue 1, ICSTSD 2016, pp. 601-605, May 2016.
- 7) Tushar Mohan Shingade, Reena Sonkusare, S. S. Rathod, P. V. Kasambe, "Design and Development of Flow Control System using LabVIEW," Proceedings of the Satellite Conference ICSTSD 2016 International Conference on Science and Technology for Sustainable Development, Kuala Lumpur, MALAYSIA, May 24-26, 2016 (available online Proceedings of the International Journal of Innovative and Emerging Research in Engineering (ISSN: 2348 – 8549), Vol. 3, Special Issue 1, ICSTSD 2016, pp. 601-605, May 2016).
- 8) P. V. Kasambe, K. S. Bhole, D. V. Bhoir, "Performance Evaluation of Embedded Strain Sensing Varying Thickness Polymer Micro-cantilever as Biosensor Platform," Proceedings of

the International Journal of Latest Technology in Engineering, Management & Applied Science (IJLTMAS) (ISSN: 2278-2540) UGC Approved Journal, Vol. VI, Issue VII, pp. 7, July 2017.

9) P. V. Kasambe, K. S. Bhole, D. V. Bhoir, “Analytical modelling, design optimisation and numerical simulation of a variable width cantilever beam MEMS switch,” Journal of Advances in Materials and Processing Technologies, Taylor Francis, pp. 1-21. July 2021. doi: 10.1080/2374068X.2021.1945263. [Scopus Indexed, ESCI indexed]

10) P. V. Kasambe, K. S. Bhole, K S. Bhole, A A Bage, N R Raykar, D. V. Bhoir, “Analytical modeling and numerical investigation of a variable width piezoresistive multilayer polymer micro-cantilever air flow sensor,” Journal of Advances in Materials and Processing Technologies, Taylor Francis, pp. 1-19. May 2022.

doi: <https://doi.org/10.1080/2374068X.2022.2076974>. [Scopus Indexed, ESCI indexed]

At National Conferences:

- 1) Kasambe, P. V., Kolekar, U. D., “Genetic Algorithms for Wireless Communication,” Proceedings of National Conference NCETCI-2007, Thadomal Shahani Engineering College, Mumbai, India, pp. 152-157, October 2007.
- 2) Kasambe, P. V., Daingade, Sangeeta, Rathod, S. S. Kolekar, U. D., “Optimizing the Performance of Control System using Genetic Algorithms,” Proceedings of National Conference NCETCI-2007, Thadomal Shahani Engineering College, Mumbai, India, pp. 125-129, October 2007.
- 3) Karan S. Shah , Samiksha R. Gupta , Gauri M. Dalvi , Surendra S. Rathod , Prashant V. Kasambe, “Simulative study of a novel MEMS Cantilever design using CoventorWare,” Proceedings of the National Conference NCATE2K16, Datta Meghe College of Engineering, Airoli, Navi Mumbai, March 2016.
- 4) Karan S. Shah , Samiksha R. Gupta , Gauri M. Dalvi , Surendra S. Rathod , Prashant V. Kasambe, “Performance Analysis of MEMS microheater by optimizing coil design using CoventorWare,” in Proceedings of National Conference on Advances in Engineering, Technology and Applied Science, SPANDAN 2016 at Yashwantrao Chavan College of Engineering, Nagpur.
- 5) S. S. Rathod, P. V. Kasambe, Prachi Gharpure, “Measuring the Effectiveness of Collaborative Learning through Technical Competitions ”, in the Proceedings of 1st National Conference on Innovations in Engineering and Management Education (NCIEME-16), jointly organized by Walchand College of Engineering Sangali and Rajarambapu Institute of Technology, Sakharale, Dec 2016.

At International Conferences:

- 1) Kasambe, P. V., Rathod, S. S., Kolekar, U. D., "Validation of Multi-Manchester Receiver Using Co-Simulation Environment of Simulink in Matlab and HDL," Proceedings of International Conference, RSPS-2008, KLCE, Andhra Pradesh, India, pp. 302-307, February 2008.
- 2) Kasambe, P. V., Rathod, S. S., "Validation of Multi-Manchester Receiver Using Co-Simulation Environment of Simulink in Matlab and HDL," Proceedings of International Conference on VLSI Design and Embedded Systems (ICVLSI'08), VEC, Tamil Nadu, India, pp. 90-96, February 2008.
- 3) Desai, F. S., Bhat, R. R., Shah, H. N., Rathod, S. S., Kasambe, P. V., "FPGA Based Implementation of Color Image Processing Techniques," Proceedings of SPIT-IEEE Colloquium and International Conference Mumbai, India, Vol. 2, pp. 59-62, Feb 2008.
- 4) Kasambe, P. V., Patel, Mohsin, "Modified Fractal Image Compression Technique Using Genetic Algorithms," Proceedings of SPIT-IEEE Colloquium and International Conference Mumbai, India, Vol. 1, pp. 134-139, Feb 2008.
- 5) Kasambe, P. V., Sutar, R. G., Ambawade, D. D., "Real Time Heart Rate Variability Analysis Using Virtual Instrumentation," Proceedings of the International Conference, ICCCI-2008, VESIT, Mumbai, India, pp. 423-425, Jan 2009.
- 6) Kasambe, P. V., Mehta, K. P., Malnika, J. A., Kothari, J. A., Shah, P. H., Rathod, S. S., "Development of Uniform Framework for Simulation, Data Acquisition and Analysis of Electronic Devices and Circuits across Various Electronics Engineering Laboratories," Proceedings of the IETE 43rd Mid Term Symposium (IETE New Delhi & Pune Centre), Pune, pp. 99-103, April 2012.
- 7) Acharya, S., Kabra, H., Kasambe, P. V., Rathod, S. S., "Performance Evaluation of an Integer Haar Wavelet Transform for FPGA Implementation," Proceedings of the International Conference ICNTE 2015, Fr. Agnel COE, Vashi, Navi Mumbai, Jan 2015. (available online 978-1-4799-7263-0/15 ©2015 IEEE Explore)
- 8) Kasambe, P. V., Rathod, S. S., "VLSI Wavelet Based Denoising of PPG Signal", Proceedings of Procedia Computer Science 49 (2015), International Conference ICAC3'15, Fr. Agnel COE, Bandra, Mumbai, pp. 282-288, Apr 2015.
- 9) Hemant Ogale, P. V. Kasambe, S. S. Rathod, "Implementation of PLC based Automated PCB Fabrication System," Proceeding of International Conference on Advanced Trends in Engineering (ICATE-2017), sponsored by The Indian Society for Technical Education (ISTE),

Datta Meghe College of Engineering, Airoli, Mumbai, April 2017. (ISBN. 978-93-86171-02-3).

10) Richa S. Wadekar, P. V. Kasambe, S. S. Rathod, "Development of LabVIEW Platform for EEG Signal Analysis," Proceedings of the International Conference on Intelligent Computing and Control (I2C2), at Karpagam College of Engineering, Coimbatore, Tamil Nadu, Vol. III, pp. 224-228, , 23-24th June, 2017, ISBN: 978-1-5386-0373-4.

11) Waingankar, Anushka, Akash Upadhyay, Ruchi Shah, Nevil Pooniwala, and Prashant Kasambe, "Face Recognition based Attendance Management System using Machine Learning," International Research Journal of Engineering and Technology (IRJET) Vol. 5, no. 06 (2018), pp 1979-1985.

12) P.V. Kasambe, V. V. Asgaonkar, A. D. Bangera, A. S. Lokre, S.S.Rathod, D. V. Bhoir, "Piezoelectric Lead Zirconate Titanate (PZT) Ring Shaped Contour-Mode MEMS Resonators," IConAMMA-2017, IOP Conf. Series: Materials Science and Engineering 310 (2018) 012069, pp. 1-8, 16-18th August, 2018, doi:10.1088/1757-899X/310/1/012069.

13) P. V. Kasambe, K. S. Bhole, D. V. Bhoir, "Design and Simulation of High SNR Varying Thickness Embedded Strain Sensing Polymer Microcantilever for Biosensing Applications," Proceedings of the ASME 2018 International Design Engineering Technical Conferences & Computers and Information in Engineering Conference IDETC/CIE 2018, August 26-29, 2018, Quebec City, Canada. <https://doi.org/10.1115/DETC2018-85731> [Scopus Indexed]

14) Prashant Kasambe, Sagar Zoting, Saurabh Thakur, Tejas Dhebe and Deepak Bhoir, "µTCD Gas Sensor: Design Optimization, Simulation and Analysis," Published at International Seminar Cum Research Colloquium on MEMS based Sensors and Smart Nanostructured Devices (MSSND 2019) held at Jadavpur University, December 27-28, 2019, Sponsored by IEEE EDS Kolkata Chapter in association with RUSA2.0, JU. [Scopus Indexed]

15) Prashant Kasambe, Abbas Barwaniwala, Bhushan Sonawane, Jay Rana, Nilesh Raykar and Deepak Bhoir, "Mathematical Modelling and Numerical Simulation of Novel Cantilever Beam Designs for Ohmic RF MEMS Switch Application," Published at IEEE International Conference on Advances in Computing, Communication and Control (ICAC3 19), held at Fr. Conceicao Rodrigues College of Engineering, Bandra, Mumbai, December 20 - 21, 2019. doi.: 10.1109/ICAC347590.2019.9036830 [Scopus Indexed]

16) S. Shelar, P. V. Kasambe and R. Kumbhare, "Microstrip Patch Antenna with Partial Ground Plane and Parasitic Patch for K Band Application in 5G," International Conference on Communication information and Computing Technology (ICCICT), Mumbai, 2021, pp. 1-6. doi: 10.1109/ICCICT50803.2021.9510092.

17) P. Deshpande, O. Gaikwad, M. Jain, K. Choksi, P. V. Kasambe and S. S. Rathod, “Automating Camera Rover for Sports Broadcast,” 2021 12th International Conference on Computing Communication and Networking Technologies (ICCCNT), IIT Khargpur, 2021, pp. 1-7. doi: 10.1109/ICCCNT5 1525.2021 .9579752.

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Patents Published: Total 05 Indian Patents

Sr. No.	Patent Title	Applicant/Inventor	Application No, Date of filing of Application & Publication Date
1	Automated System with Multiple Features Which Provides Clean Water with New Maintenance Technique	Thakur Saurabh, Dhebe Tejas, Valvi Vipin, Shinde Prathmesh, Kasambe Prashant	201821033536 06/09/2018 14/09/2018
2	Smart Water Maintenance System for Bio-Sand Filters Without Human Interference	Thakur Saurabh, Dhebe Tejas, Valvi Vipin ,Shinde Prathmesh, Kasambe Prashant	201921022929 10/06/2019 21/06/2019
3	An Intelligent Bio-Sand Filter With Automatic Water Feeding System	Shinde Prathmesh, Valvi Vipin, Ramanujam Adithya, Parab Manish, Kasambe Prashant	201921022932 10/06/2019 21/06/2019
4	Mechanism For Transmitting Graphical Data Over Text Message and Displaying it on Receiver End	Naman Patwa,Isha Yadaw, Neil Daftary, Ashish Kulkarni ,Prof. P. V. Kasambe	201821029467 06/08/2018
5	Systems and Methods for Dynamic Prosthetic Leg with Adaptive Actuators	Suumedh Kalnanwat, Swapnil Khandekar, Sukruth Ramesh, P. V. Kasambe	202121022570 2021/05/20

Research Guidance: [2 Post Graduate]

1. Name of the Student: Miss. Richa Wadekar, M. E. Extc, 2016-17.

Topic: Development of LabVIEW Platform for EEG Signal Analysis

Publication: Development of LabVIEW Platform for EEG Signal Analysis,” Proceedings of the International Conference on Intelligent Computing and Control (I2C2), at Karpagam College of Engineering, Coimbatore, Tamil Nadu, Vol. III, pp. 224-228, , 23-24th June, 2017, ISBN: 978-1-5386-0373-4.

2. Name of the Student: Mr. Sahil Shelar, M. Tech. Extc, 2019-21, Topic: Reconfigurable Antenna Design Using MEMS Switch

Publication: "Microstrip Patch Antenna with Partial Ground Plane and Parasitic Patch for K Band Application in 5G" at 4th International Conference on Communication, Information and Computing Technology, ICCICT-2021.

Sponsored Research/Consultancy: Total Sponsorship Amount: Rs. 4,83,333/-

Title of the Project	Reference Details	Authority	Amount	Duration
Design, Development and Automation of Bio-Sand Filter	Minor Research Project APD/237/601of2019 dated 27th Mar 2019 Research Project No. 169	Mumbai University	25,000/-	One year (2018-19)
Design and Development of an Experimental Setup for process Control and Instrumentation Laboratory Using Lab VIEW for e-Learning	Minor Research Project Ref No. APD/237/419 of 2016 dated 9 th Feb. 2016 of Research Project No. 392	Mumbai University	25,000	01 year (2015-16)
Outcome Based Education: Critical Issues and Solution (A Case Study Approach)	STTP under AQIS 2019-20 Ref. No. 34-66/ 138L/FDC/STTP/Policy-2019-20 dated 10 th Aug 2020	AICTE, New Delhi	333,333/-	01 year 2019-20
AICTE-SPICES (Sponsored to Institute)	Application No:1-11112050091-reg	AICTE, New Delhi	100,000/-	01 year 2022-2023

Projects/Patents successfully completed with Industry/Alumini

Name of the Students/Industry		Title of the Project/Patent	Nature of association	Duration
Ajay Upadhaya, Saurav Tiwari and Sachin Sonawane	Femstruct Consulting Engineers, LLP, 304, 03rd Floor, Plot 1A, Kalpak Estate, Shaikh Misree Road, Antop Hill	IoT enabled Low Cost and Low Power Sensor for Natural Frequency Testing of Bridge	Components and H/W, S/W resources	1 Year (2019-20)
Param Deshpande, Omkar Gaikwad, Manav Jain, Krisha Choksi,	Quidich Innovations Lab Pvt. Ltd., Mumbai	Gimbal Control for Directing Cinematographic Buggy		1 Year (2019-20)
Param Deshpande, Omkar Gaikwad, Manav Jain, Krisha Choksi	Quidich Innovations Lab Pvt. Ltd., Mumbai	Buggy Construction for Directing Cinematographic Buggy		1 Year (2019-20)
Param Deshpande, Omkar Gaikwad, Manav Jain, Krisha Choksi	Quidich Innovations Lab Pvt. Ltd., Mumbai	Trajectory Generation of Gimbal and Chasis for Cinematographic Buggy		1 Year (2020-21)
Thakur Saurabh, Dhebe Tejas, Valvi Vipin ,Shinde Prathmesh	NA	Smart Water Maintenance System For Bio-Sand Filters Without Human Interference.	Patent	1 Year (2020-21)