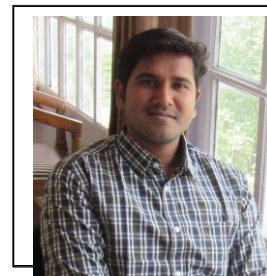


Faculty Profile



Name of Teaching Staff : **Mayur V. Parulekar**

Designation : **Assistant Professor**

Department : **Electronics Engineering**

Date of joining the Institution : **05/07/2010**

Qualifications with Class/ Grade : 1. B.E. (EXTC), University of Mumbai, Distinction 76%, April 2009
2. M.E. (EXTC), University of Mumbai, Distinction 71%, April 2014

Total Experience in years : **Teaching – 5 years**

1. Assistant Professor, D.J. Sanghvi College of Engineering from 5.7.2010 till date.
2. Lecturer (Adhoc), D.J. Sanghvi College of Engineering from 24.1.2010 to 30.6.2010

Industry: 6 months

Papers Published

National

[1] M.Parulekar, Dr. A.A.Deshmukh, Dr. K.P Ray *et al*, “**Broadband Circular Microstrip Antenna**”, Antennas and Propagation Symposium, Cochin University for Science and Technology-CUSAT, Kochi, India, pp.19-22, APSYM 2010

[2] M.Parulekar, Dr. A.A.Deshmukh, Dr. K.P Ray *et al*, “**Modal Analysis of Broad and Dual Band Slot cut Rectangular Microstrip Antenna**”, Antennas and Propagation Symposium, Cochin University for Science and Technology-CUSAT, Kochi, India, pp.15-18, APSYM 2010

[3] M.Parulekar, Dr. A.A.Deshmukh, Dr. K.P Ray *et al*, “**Broadband Proximity Fed Rectangular Microstrip Antenna Array**”, **Antennas and Propagation Symposium, Cochin University for Science and Technology-CUSAT, Kochi, India, pp.75, APSYM 2010**

[4] M.Parulekar, Dr. A.A.Deshmukh, *et al* “**Analysis of Stub Loaded Dual Band Semicircular Microstrip Antenna**”, **National Conference on Communication Technology, pp. 124-129, NCCT-2011, Mumbai, India**

[5] M.Parulekar, V.Ramesh, *et al*, “**Modernization of Process Control System using LabVIEW**”, TechnoFocus Vol.1, Issue 2, pp.66- ISSN 2229-662X

[6] M.Parulekar, V. Modhe, N. Paradkar, M. Mistry, “**Self balancing Scooter**”, TechnoFocus Vol.2, Issue 1, pp.12- ISSN 2229-662X.

[7] M.Parulekar, Dr. A.A.Deshmukh, P.Patki, “**Slot Loaded Dual band Microstrip Antenna**”, published in TechnoPath-Journal of Science Engineering and Technology (ISSN 0975-525X) Vol. 3, Issue 2, pp 13-18 at MPSTME, NMIMS, Mumbai.

[8] M.Parulekar et al. “**Congestion Control & Collision Avoidance Algorithm In Intelligent Transportation**

International

- [1] M.Parulekar, Dr. A.A.Deshmukh, Dr. K.P. Ray *et al.*, “ **Proximity Fed Rectangular Microstrip Antenna**”, International Symposium on Microwave and Optical Technology, Prague, Czech Republic, pp.179-182, published in Proceedings of ISMOT 2011 (ISBN-978-80-01-04887-0)
- [2] M.Parulekar, Dr. A.A.Deshmukh, Dr. K.P. Ray *et al.*, “ **Broadband L-shaped slot cut Rectangular Microstrip Antenna**”, International Symposium on Microwave and Optical Technology, Prague, Czech Republic, pp.183-186 published in Proceedings of ISMOT 2011 (ISBN-978-80-01-04887-0)
- [3] M.Parulekar, Dr. A.A.Deshmukh, Dr. K.P. Ray *et al.*, “ **Analysis of proximity fed Broadband slot cut Rectangular Microstrip Antennas** ”, International Symposium on Microwave and Optical Technology, Prague, Czech Republic, pp.539-542, published in Proceedings of ISMOT 2011 (ISBN-978-80-01-04887-0)
- [4] M.Parulekar, Dr. A.A.Deshmukh, Dr. K.P Ray *et al.*, “**Broadband Proximity Fed Modified E-Shaped Microstrip Antenna**”, National Conference on Communications, IISC Bengaluru, India, pp. 36-40, NCC 2011
- [5] M.Parulekar, Dr. A.A.Deshmukh, Dr. K.P Ray *et al.*, “**Broadband Proximity Fed Hexagonally Arranged Rectangular Microstrip Antenna Array**”, International Conference on Microwaves, Antenna, Propagation and Remote Sensing- pp.7, ICMARS 2011, Jodhpur, India-http://www.radioscience.org/tentative_session.php
- [6] **M.Parulekar, Dr. A.A.Deshmukh, K.P. Ray et al.**, “Analysis of Stub Loaded Circular Microstrip Antenna”, **International Conference on Microwaves, Antenna, Propagation and Remote- pp.12, ICMARS 2011, Jodhpur, India.**
- [7] M.Parulekar, V.Padte, P.Dalal, P. Nair presented a paper, “**Congestion Control and Peer-to-Peer Communication for Collision Avoidance** at ICECT 2012, Kanyakumari. Published by IEEE Xplore, ICECT 2012 Volume 2 ISBN No 978-1-4673-1849-5 pp 233-237 and referenced by ISI Thompson and Ei Compendex
- [8] M.Parulekar, Dr. V. Ramesh *et al.*, “**QoS Improvement using NLMPC for Collision Avoidance and Co-operative Information Processing**”, published in conference proceeding of ICIP Bangalore 2012, p.p 569-578 in LCNS Springer Verlag Proceedings ISBN 978-3-642-31685-2
- [9] M.Parulekar, Viraj Padte *et al.*, “**Vehicular Localization & Intelligent Transportation Systems**” published by **IEEE Xplore** Digital Library ISBN 978-1-4673-5114-0 at 12th International Conference on Hybrid Intelligent Systems held from 4th – 6th December 2012.pp 306-311
- [10] M.Parulekar, Viraj Padte, *et al.*, “**Automatic Vehicle Navigation using Dijkstra’s Algorithm**” published by **IEEE Xplore** Digital Library ISBN 978-1-4673-5618-3 p.p 54 at ICATE 2013 held from 25-27 January 2013. <http://toc.proceedings.com/18307webtoc.pdf>
- [11] M.Parulekar, Viraj Padte, *et al.*, “**Dynamic Matrix & Model Predictive Control for Semi-Auto Pilot Car**” published by **IEEE Xplore** Digital Library ISBN 978-1-4673-5618-3 p.p 216 at ICATE 2013 held from 25-27 January 2013. <http://toc.proceedings.com/18307webtoc.pdf>

[12] M.Parulekar, Viraj Padte, *et al*, “**Controller Area Network for Intelligent Vehicular Systems**” published by **IEEE Xplore** Digital Library ISBN 978-1-4673-5618-3 p.p 260 at ICATE 2013 held from 25-27 January 2013. <http://toc.proceedings.com/18307webtoc.pdf>

[13] M. Parulekar, Viraj Padte, Dr. V. Ramesh, “**Modeling the Lane Contention Algorithm for Control in Intelligent Vehicular Systems**” published by **Elsevier** at the **American Applied Sciences & Research Institute Procedia (ISSN 2212-6716)** and referenced by ScienceDirect and Scopus, presented at **Intelligent Systems & Control 2013, Vancouver Canada**. <http://www.isc-conf.org/ISC2013Contents.pdf>

[14] M.Parulekar, “Collision Avoidance in Self- Aware Vehicles: A Model Predictive Control Approach in Lane Contention Algorithm and Vehicular Localization for Intelligent Transportation Systems”, **to be published in honours at the IEEE Electron Devices Society Chapter as Best Paper in National Technical Paper Contest for research scholars by National Instruments India.**

Consultancy Activity & Awards:

1-Technical Advisor & Consultant at **Moyyer Research** – www.moyyerresearch.com
Date of Appointment: 12th June, 2010

2- Techno Consultant, Mentor Strategist & Web Designer at **Budding Bots** – www.buddingbots.com
Date of Appointment: 28th May, 2011

3- Consultant & Mentor at **BucketBolt – Online Book Store** – www.bucketbolt.com
Date of Appointment: 20th September, 2010

4- Consultant, Web Development & Coursework Supervisor at **StudyLeague Education Services** – www.studyleague.com Date of Appointment: 01st Feb, 2012

5- Consultant & Principal Investigator for Project on “Pick & Place Robot” for **Silicon Valley Innovation Group, Cupertino** to be setup for Science Centre in India.
Date of Appointment: 11th July 2013-2014

Academics/Workplace Achievements/Workshops

1- College **rank 1 at the BE-Electronics and Telecomm University Examination-2009**

2- Recipient of the Huntsman International Academic Scholarship.

3- Recipient of the Reserve Bank of India Young Scholars Scheme.

4- Awarded **Best Teacher** by students at D. J Sanghvi College of Engineering

5- Recipient of two Bronze Medals at Manshodhan 2010 for Best Engineering Projects

6- Guided the SCARA robot project that won the **Most Popular Project** Worldwide at **National Instruments Student Design Competition USA 2012**.It also won the **Best Project Award** in Maharashtra State, India at DJ Spark, Mumbai 2012. This was also published and presented at IWAMA 2012 at SFI Norman, Norway.

7- Won 2nd Prize for Project “**Intelligent Transportation Systems**” in PG section of Mumbai University Avishkaar Research Convention and further represented Mumbai University in the Inter-University Research Convention and again stood 2nd in 17 universities

8- Guided the Project “**Staircase Climbing Wheelchair for Handicapped**” which won 1st place in Mumbai University Research Convention Avishkaar and further represented Mumbai University at Inter-University Research Convention where we again stood 1st in 17 universities. The Project has also won “Best Project Award” by **Tata Consultancy Services**.

9- Won **Best Project & Best Technical Paper at VIMANTRA 2013 by National Instruments** for Research Scholars in India. <http://india.ni.com/vimantra/winners>

List of Important Projects & Research

1- Modernization of Process Control System using LabVIEW- Associate Guide

Link: <https://decibel.ni.com/content/docs/DOC-15850>

2- Autonomous Self Balancing Electric Vehicle- The ElexiMobil- Associate Guide

Link: www.youtube.com/watch?v=gpsr_3P8jBY

3- Guide for Scilab Code Conversion of textbook for project at IIT Bombay.

Link: www.scilab.in/Bolton

4- Internet based control System using LabVIEW- Associate Guide

5- Controlling SCARA ROBOT using Virtual Open Sourced Teach Pendant and provide a unique HMI using LabVIEW Link: <https://decibel.ni.com/content/docs/DOC-21933>

6- Staircase Climbing Wheelchair for Handicapped won the 1st Prize in UG Section at Avishkaar Inter-University Research Convention.

7-Intelligent Transportation Systems won 2nd Prize in PG Section at Avishkaar Inter-University Research Convention

8- Intelligent Transportation Systems won “**Best Project & Best Technical Paper**”, presented at VIMANTRA 2013 Competition by National Instruments, India for post graduate research scholars.

PROJECTS ON “INTELLIGENT TRANSPORTATION SYSTEMS”

Research & Innovation Cell, DJSCE

1- Embedded board for On-board Diagnostics and GPS logging for autonomous vehicles

2- Vehicle fleet data exchange server for collecting location, car diagnostic data for fleet of cars

3- HOG based pedestrian detection using OpenCV

4- Optimizing performance of HOG descriptor based pedestrian detection using CUDA supported functions for OpenCV

5- Design and implementation of frame modification algorithm for implementation of Distributed control system in LabVIEW

6- Implementation of Kalman filter for Vehicle tracking using LabVIEW

7- Autonomous vehicle simulations using NI Robotics Environment Simulator

Institutional Membership: IEEE Branch Counsellor – DJSCOE & Research Innovation Cell In-charge Electronics