Curriculum Vitae

Mayur V. Parulekar

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Professional Summary

• 10 years Asst. Professor at Dwarkadas J. Sanghvi College of Engineering (05th July, 2010- Present)

Work Experience – Dwarkadas J. Sanghvi College of Engineering

- Social Media Head (Instagram, LinkedIN) & Alumni Co-ordinator-DJSCE
- Admissions, NAAC & NBA Core Committee Team DJSCE
- Faculty Mentor IEEE Student Chapter DJSCE
- Training & Placement Cell Coordinator for Electronics Department
- National Entrepreneurship Development & IIC Coordinator at D.J. Sanghvi College
- SPoC Microsoft Teams DJSCE
- IBM Analytics & Data Science Program Faculty
- IIRS- ISRO Program Faculty Co-ordinator DJSCE

Specialization_

M.E EXTC – D.J Sanghvi College Distinction (June 2011- June 2014)

B.E EXTC- Watumull College Distinction & Rank 01 (June2005-June 2009)

Academic/Workplace Achievements_

- 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- Recipient of two Bronze Medals at Manshodhan 2010 for Best Engineering Projects
- 5- -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.
- 6- 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.
- 7- 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.
- 8- Won Best Project & Best Technical Paper at VIMANTRA 2013 by National Instruments for Research Scholars in India. <u>http://india.ni.com/vimantra/winners</u>



List of Projects as Research & Innovation Co-ordinator

- Modernization of Process Control System using LabVIEW- Associate Guide Link: https://decibel.ni.com/content/docs/DOC-15850
- Autonomous Self Balancing Electric Vehicle- The ElexiMobil- Associate Guide Link: www.youtube.com/watch?v=gpsr_3P8jBY
- Guide for Scilab Code Conversion of textbook for project at IIT Bombay. Link: <u>www.scilab.in/Bolton</u>
- Internet based control System using LabVIEW- Associate Guide
- Controlling SCARA ROBOT using Virtual Open Sourced Teach Pendant and provide unique HMI using LabVIEW Link: https://decibel.ni.com/content/docs/DOC-21933
- Staircase Climbing Wheelchair for Handicapped won the 1st Prize in UG Section at Avishkaar Inter- University Research Convention
- Intelligent Transportation Systems won 2nd Prize in PG Section at Avishkaar InterUniversity Research Convention
- Intelligent Transportation Systems won "Best Project & Best Technical Paper", presented at VIMANTRA 2013 Competition by National Instruments, India for post graduate research scholars.
- Guided two projects Hydroponics & Roadmap to Urban Transportation that participated at the Avishkar Research Convention In Dec 2018 on behalf of University of Mumbai

List of Research Grants_

- BEST_R Urban Rapid Mass Transportation System, Mumbai University Research Grants
- ARM & NVIDIA Grant Received In-Kind for Final Year Project Students

List of Consultancy Work

- Technical Advisor & Consultant at Moyyer Research www.moyyeresearch.com Date of Appointment: 12th June, 2010 to Present
- Techno Consultant, Mentor Strategist & Web Designer at Budding Bots www.buddingbots.com Date of Appointment: 28th May, 2011 to Present
- Consultant & Mentor at BucketBolt Online Book Store <u>www.bucketbolt.com</u> Date of Appointment: 20th September, 2010 to Present
- Consultant, Web Development & Coursework Supervisor at StudyLeague Education Services www.studyleague.com Date of Appointment: 01st Feb, 2012 to Present
- 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: 30 July, 2013 – 30 July, 2014
- Consultant For Manufacturing & Design Process of Industrial Robots for JALARK a collaborative tech company founded by Oxford PhD student Siddhant Gangapurwala in collaboration with ETH Zurich.
- Design Consultant Rajwa & Epiphany, MyLab and Ride App

LIST OF PUBLICATIONS

Conference Proceedings

- [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, Dr. K.P. Ray et al.," Proximity Fed RectangularMicrostrip 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)
- [5] 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)
- [6] 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-978800104887-0)
- [7] 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
- [8] 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 & remote sensing, pp7, ICMARS 2011, Jodhpur India.
- [9] 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
- 10] 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
- [11] M.Parulekar, V.Padte, P.Dalal, P. Nair presented a paper, "Congestion Control and Peerto-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
- [12] M.Parulekar, Dr. V. Ramesh et al, "QoS Improvement using NLMPC for Collision Avoidance and Cooperative 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
- [13] 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 – 6 th December 2012.pp 306-311

- [14] M.Parulekar, Viraj Padte, et al, "Automatic Vehicle Navigation using Dijikstra'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
- [15] M.Parulekar, Viraj Padte, et al, "Dynamic Matrix & Model Predictive Control for SemiAuto 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. <u>http://toc.proceedings.com/18307webtoc.pdf</u>
- [16] 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
- [17] 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 by Intelligent Systems & Control, Vancouver Canada <u>http://www.sciencedirect.com/science/article/pii/S2212671613000097</u>
- [18] 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 honors at the IEEE Electron Devices Society Chapter as Best Paper in National Technical Paper Contest for research scholars by National Instruments India

JOURNAL PROCEEDINGS

- [1] M.Parulekar, V.Ramesh, et al, "Modernization of Process Control System using LabVIEW", TechnoFocus Vol.1, Issue 2, pp.66- ISSN 2229-662
- [2] M.Parulekar, V. Modhe, N. Paradkar, M. Mistry, "Self balancing Scooter", TechnoFocus Vol.2, Issue 1, pp.12-ISSN 2229-662X.
- [3] 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.
- [4] Parulekar, Mayur V., et al. "Congestion Control & Collision Avoidance Algorithm In Intelligent Transportation Systems, published at the International Journal of Computer Engineering & Technology (IJCET)." Journal Impact Factor 4.2 (2013): 114-124. ISBN 0-19- 515011-2