PERSONAL PROFILE

DR. YASHAVANTKUMAR DASHRATHLAL PATEL

Dr. Yashavant Patel is an associate professor and Head of Department in Mechanical Engineering at A D Patel Institute of Technology (ADIT) affiliated to CVM University. His fields of interest include Multibody Dynamics, Mechanism Design, Robotics, CAD and Machine Design.

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EDUCATIONAL QUALIFICATION

DEGREE	SUBJECT / SPECIALIZATION	PERCENTAGE & CLASS	YEAR OF PASSING	INSTITUTE / UNIVERSITY
SSC	--	78.57 & Distinction	1990	G.S.E.B.
HSC	--	75.50 & Distinction	1992	G.S.E.B.
BE	Mechanical	7.6 CPI & First	1996	B.V.M.Engg., V.V.nagar
ME / M Tech.	Machine Design	9.14 CGPA & Dist.	2004	IIT, Roorkee (2nd Rank)
Ph. D.	Robotics: Parallel Manipulator	--	2014	Sardar Patel university

INDUSTRIAL EXPERIENCE

COMPANY & PLACE	DESIGNATION	FROM – TO	DURATION
Tata Chemicals Ltd., Mithapur	Graduate Trainee Engineer	September 1996 to July 1997	11 months

ACADEMIC EXPERIENCE

INSTITUTE & PLACE	DESIGNATION	FROM – TO	DURATION
B.V.M. Engg. College, Vallabh Vidhyanagar	Adhoc Lecturer	September 1997 to January 1999	1 Year
S.V.I.T., Vasad	Lecturer	January 1999 to September 2006	7 Year & 9 months
S.V.I.T., Vasad	Assistant Professor	October 2006 to June 2007	9 months
ADIT, New V.V. Nagar	Associate Professor	July 2007 onwards	13 Years

LIST OF PUBLICATION

REFEREED JOURNAL PAPERS

1. Patel, H. R., & Patel, Y., Inverse kinematic analysis of 3 DOF 3-PRS PM for machining on inclined prismatic surfaces. IAES International Journal of Robotics and Automation, 9(2), 135, 2020

2. Haresh K Devjani, Pratik D Patel, Akshay Mahitkar, Y D Patel, A R Srinivas, Design & Development of an Offset Unfurlable Parabolic Reflector for a Satellite Antenna, International Journal for Research in Applied Science & Engineering Technology, Vol.6 (III), 2577-2583, 2018

3. VD Patel, YD Patel, KJ Shah, J Bhura, Thermo Structural analysis of Conventional type Jackated (MSGL) pressure vessel, ADIT Journal of Engineering, Vol. 14(1), 3-7, 2017

4. Parth Kamaliya, Yashavant Patel, Kinematic Modeling and Function Generation for Non-linear Curves Using 5R Double Arm Parallel Manipulator, Journal of The Institution of Engineers (India): Series C, Springer, sept, 2015

5. Y D Patel, P M George, Simulation of kinematic and workspace analysis of 3-PRS parallel manipulator, International Journal of Modeling, Simulation and Scientific Computing, Vol. 6 (1), 2015
   DOI: 10.1142/S1793962315500075, ISSN 1746-7233

6. Y D Patel, P M George, Performance Measurement and Dynamic Analysis of two DOF Robotic Arm Manipulator, International Journal of Research in Engineering and Technology, Vo. 2(9), 2013

7. Y D Patel, P M George, Parallel Manipulators Applications—A Survey, Modern Mechanical Engineering, Vol. 2, 57-64, 2012

8. Ashish Thakkar, Y D Patel, Integration of Pro\Engineer with Excel and C Language for Design Automation, Vol.1(4), 2012

9. Y D Patel, K B Mulchandani, New Method to Extract Stress Intensity Factor using Single Isochromatic Fringe Loop, Institution of Engineers Journal IE(I)- MC, Vol.87,46-55, 2007

PAPERS IN INTERNATIONAL CONFERENCE PROCEEDINGS

1. Y D Patel Lay Patel, Design and FEA analysis of jacketed type pressure vessel, Second International Conference on "Research and Innovations in Science, Engineering & Technology" - ICRISET-2020

2. Patelia Mitesh, Yashavant Patel, Modelling and Gait Analysis of 6-DOF Biped Robots with Flat & Curved Feet, 8th International Conference on Advancements and Futuristic Trends in Mechanical and Materials Engineering - (AFTMME- 2020)

3. Harikrishna Dobaria, Y D Patel, D A Jani, Improving dimensional accuracy by error modelling and its compensation for 3-axis Vertical Machining Centre, 2nd International and 17th National Conference on Machines and Mechanisms, iNaCoMM2015, IIT Kanpur, Dec, 2015

4. Tanuja Mishra, Y D Patel, U A Joshi, Design of lobe pair profile of an external rotary lobe pump, 2nd International and 17th National Conference on Machines and Mechanisms, iNaCoMM2015, IIT Kanpur, Dec, 2015

5. Naresh Chavda, Y D Patel, D A Jani, P Jha, Design and analysis of 100 T capacity bottom pulley hook block for double girder EOT crane, NuiCoNE 2015, Nirma University, Nov., 2015

6. Ketan Patel, Vinit Nayakpara, Yogin Patel, Y D Patel, Workspace and singularity analysis of 3-RRR planar parallel manipulator, Proceedings of the 1st International and 16th National Conference on Machines and Mechanisms (iNaCoMM2013), IIT Roorkee, 18-20th Dec., 2013

7. K J. Modi, Y D. Patel, H B. Joshi, C Turakia, "Geometric Design of Profile for Triple Screw Rotor Pump", 22nd ISTE State Annual Convention and Conference on Theme "Engineering Innovations for Social and Environmental Development", p.p. 247-252, ADIT, 30th Dec 2017.

8. J G. Dharsandiya, V M. Vaghasiya, Y D. Patel, "Trajectory Planning for Spatial Dual Arm Manipulator", 22nd ISTE State Annual Convention and Conference on Theme "Engineering Innovations for Social and Environmental Development", p.p. 253-258, ADIT, 30th Dec 2017.

9. D Dangroshiya, Y D Patel, T R Prajapati, "Design Synthesis for 18 Speed Gear Box for a machine tool", 22nd ISTE State Annual Convention and Conference on Theme "Engineering Innovations for Social and Environmental Development", p.p. 259- 264, ADIT, 30th Dec 2017.

10. V Chauhan, S G Soni, Y D Patel, "Foot Design for Bipedal Robots: A review", 22nd ISTE State Annual Convention and Conference on Theme "Engineering Innovations for Social and Environmental Development", p.p. 265- 269, ADIT, 30th Dec 2017.

11. V D Patel, Y D Patel, K J Shah, J Bhura, "Thermo-structural analysis of conventional type jacketed (MSGL) vessel", 22nd ISTE State Annual Convention and Conference on Theme "Engineering Innovations for Social and Environmental Development", p.p. 276-281, ADIT, 30th Dec 2017.

12. H K Devjani, P D. Patel, Y D Patel, A R. Srinivas, "Review of Technological Developments In Mesh Deployable Reflectors", 22nd ISTE State Annual Convention and Conference on Theme "Engineering Innovations for Social and Environmental Development", p.p. 282-287, ADIT, 30th Dec 2017.

RESEARCH PROJECT SUBMITTED TO FUNDING AGENCY

Sr. No.	Title	PI / Co-PI	Agency	Amount (Rs. in lakhs)
1	Effect of condylar total knee arthroplasty implant on flexion axis, moment arms and range of motion in lower extremity	Co-PI	GUJCOST	9.9
2	Experimental Investigation of Dual Arm Manipulation in 2D and 3D space	PI	GUJCOST	9.0
3	Modelling and control of biped robotic system	PI	AICTE	24.85

ADMINISTRATION DETAILS

- ISO Process owner: Laboratory Teaching, Administration
- Training and placement coordinator of Mechanical Engineering Department (2015-16, 2016-17)
- NBA Coordinator of Mechanical Engineering Department (2007-2017)
- Coordinator for NIRF, GTU affiliation details of mechanical engineering department and Institute
- Institute faculty Coordinator of Robocon '17, Robocon '18, Robocon '22
- Coordinator of ADIT-AICTE IDEA LAB Project of Rs. 1.1 Crore
- Professor In-charge Administration
- Coordinator of Student Startup and Innovation Policy (SSIP) from 2018-2020
- Co-Coordinator of CVM University Innovation and Startup Centre

OTHER CONTRIBUTIONS

- Guided around 48 PG Dissertations
- Guided around 100 UG Projects
- Reviewer of ROBOTICA, International refereed journal, Cambridge University Press
- Reviewer of NCIET-2016 National Conference
- Coordinator of 47th Engineer's Day Celebration on 20th Sept, 2014
- Coordinated two days training program on "FEA with ANSYS" on 26th-27th Feb., 2015
- Coordinator of Mandap and sound committee during GTU Techfest at ADIT from 22nd to 24th February, 2016
- Coordinated student awareness program Indian Nuclear Program by Kakrapar power station on 8th Sept, 2016
- One-day training program organized for Mechanical and Automobile Engineering, 2nd April, 2016
- Introductory training on ANSYS, conducted for the faculty members of Mechanical and Automobile Engineering 26-27 February, 2015.

MEMBERSHIP

Sr. No.	Name of Organization	Membership Number
1	Indian Society for Technical Education (ISTE)	LM-30542
2	Institution of Engineers (IE)	M-141674-4
3	Robot Society of India (RSA)	R-180849

BOOKS PUBLISHED

YEAR OF PUBLICATION	TITLE OF BOOK	CO-AUTHORS	NAME OF PUBLISHER
2002-2003	CAD/CAM ISBN No: 938151891-2	Prof. C.M.Desai	ATUL PRAKASHAN
2004-2005	Revised edition of CAD/CAM	Prof. C.M.Desai	ATUL PRAKASHAN
2006-2007	Paper solution of programming Paradigm (C-Language)	--	ATUL PRAKASHAN

STTP/TRAINING

Sr. No.	Name of Event	Duration	Hours
1	Imparted training on "AutoCAD-2018 (Drafting Module)" to First year BE students of ADIT	8th August to 10th September, 2018	20 Hours
2	Member of organizing committee for two weeks national level Faculty Development Program on "Entrepreneurship Development"	5th-17th, March, 2018	3 Hours
3	Coordinator of one day workshop on "Modelling Simulation using MATLAB & Simulink" at CAD Lab of Mechanical Engineering Department.	10th February, 2018	5 Hours
4	Coordinator of workshop on "Solid Works"	30th January, 2018	2 Hours
5	Coordinator of "Robotics Workshop" during ZERO-15 held at A D IT	8th and 9th April, 2015	8 Hours
6	Coordinator of two days' workshop on "Robotics" at ADIT by SparkLab	21-22 March, 2014	10 Hours
7	Coordinated a three days "Robotics workshop" for the students of CVM institutions during ABACUS-2013.	4-6 March, 2013	15 Hours
8	Coordinator of two days program on "MATLAB for Mechanical Engineers	7-8 February, 2009	8 Hours
9	A training program to students on "Pro/Engineer software"	August-Oct, 2009	50 Hours
10	A training program on Pro/Engineer for faculty	4th -8th March, 2008	1 week (25 Hours)
11	A training program to industry people on "Pro/Engineer software" organized by ADIT and VUIA	7th - 17th Sept., 2007	1 week (30 Hours)

WORKSHOP / SEMINAR / SYMPOSIUM

- ORGANIZE " Modelling and simulation using MATLAB and SIMULINK" at ADIT
- ORGANIZE Coordinator of workshop on "Solid Works" for third Year BE students

EXPERT TALK DELIVERED

Sr. No.	Details
1	Delivered an expert talk on Automated Part Programming using CREO at B & B Institute of Technology, V V Nagar on 13/3/2019
2	Delivered an expert talk on "Robotics sensors and Grippers" at TEQIP-III sponsored one week short term training program on "Robotics and Control" during 4th-9th June, 2018 at BVM
3	Expert lecture on ""Manual CNC Part programming & Simulation with hands on Exercise" delivered on 8th June, 2018 at 1:30 to 3:30 pm and 3:45 to 5:45 pm in TEQIP-III sponsored STTP on "Manufacturing process modelling and simulations" - MPMS-2018 during 4th to 5th June, 2018 at BVM
4	Expert lecture on "Recent trends in CAD" delivered at Sigma Institute of Engineering, Vadodara on 21st February, 2018 to final year students and faculty members.
5	Participated in Brain storming session on "How to identify Right Funding agency for research?" 0n 27/06/2018 at ADIT in room no. 141
6	Coordinated brain storming session on "How to set a good question paper?" on 29/06/2018 at ADIT in room No. 141
7	Delivered expert lecture on "Mechanism Design" at ISTE approved two week STTP on "Applications of software in Mechanical Engineering" during 18th -30th, Dec., 2017 at B V M Engineering College
8	Delivered a speech on "Applications of robotics" to final and pre-final year students at C S Patel Institute of Technology, Changa on 20th March, 2017
9	Engineering Mechanics FDP on Fundamentals of Mechanical Engineering Institute of Engineering & Technology and Parul Institute of Technology
10	Conducted session on topic "Research on kinematics and workspace analysis of parallel robots" in STTP on "Recent Trends in Robotics" , 5th-10th December, 2016
11	Delivered expert lectures on "Robotic Gripper Design" and "Robotics Sensor and Machine Vision" at the TEQIP-II sponsored one week STTP on Robotics and Control during 21st Nov., 2016 to 26th Nov., 2016 at B V M Engineering College.
12	Expert talk on "KIF of crack components" at STTP on Finite Element Simulations using ANSYS at B V M Engineering College during 2nd May 2016 to 6th May, 2016
13	Introduction to Mechanism Design and Creating Mechanism Connections, CAE using CREO, TEQUIP-II sponsored one week STTP, B V M Engg. College
14	Configuring Motions in Mechanism & Analysis and Advanced Mechanism Analysis, Computer Aided Engineering using CREO, TEQUIP-II sponsored one week STTP, B V M Engineering College
15	"Mechanism analysis using Pro/Engineer" under ISTE Student Chapter- Expert Talk at G H Patel Institute of Technology, Vallabh Vidyanagar
16	"FEM- A solution to many engineering problems" IE Student Chapter- Expert Talk at L E College, Morbi.

| 17 | Delivered an expert talk on "Power of Pro/E" at the DTE-ISTE approved one week STTP on Modern Computing Techniques in Mechanical Engineering during 4th-8th January, 2010 |