# **BIO-DATA**



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1.	Name			Deepak Devasagayam				
2.	Designation			Assistant Professor				
3.	Contact Address			Mechanical Engg. Dept., FCRIT, Vashi				
4.	Website			tps://fcrit.ac.in/faculty/40/m	<u>r-deepak-devasagayam</u>			
5.	*			3 years	Branch/Specialization  Mechanical Engineering Mechanical Engineering  Mechanical Engineering  Mechanical Engineering  Mechanical Engineering  Designation  Massistant Professor  Manufacturing Engineer  Engineering Intern			
i.	8			13.5 years				
ii.			4.	4.5 years				
6.	Qualificat	tions						
		Exam Passed	Year	Institution/ University	Branch/Specialization			
		M. E.	2006	Old Dominion Univ, USA				
		B. E.	2001	DMCOE, Airoli (Mumbai University)	Mechanical			
	Additional Qualification:							
7.	Employment Record							
	Fr. C. Rodrigues Institute technology, Vashi			Year (From	Designation Γο)			
					/			
	Martin Innovations, NC USA			July 2007 - Dec 20				
	Amadas Industries, 'USA			September 2005 – May	Engineering Intern			
	Stihl	Inc., VA, U	JSA	March 2005 – June 20	05 Engineering Intern			
8.	Undergraduate / Postgraduate Teaching Experience and Subjects Taught							
	Subjects Taught at UG level							

Sr. No.	Name of Subject	Semester
1.	Environmental Studies	I
2.	Production Process - I	III
3.	Materials & Metallurgy	IV
4.	Production Process – II	IV
5.	Environmental Studies	V
6.	Production Process – III	V
7.	Design of Jigs & Fixtures	V
8.	Press Tool Design	VI
9.	Manufacturing, Planning and Control	VII
10.	Operation Research	VII
11.	Logistics & Supply Chain Management	VII
12.	Product Design and Development	VIII

9.	Research Experience											
		Technical Collaboration / Lab Funding with Industries										
	Sr.	Name of the Funding	Name of Project	Amount (Rs.)	Year							
	No.	Organization										
	1.	Tata Institute of	Design of Laser	Rs. 30000	2017-18							
		Fundamental Research	Wall System									
		(TIFR), Mumbai										
10.	Professional Societies Fellowship / Membership											
	1. ISHRAE											
	2.											
	3.	3. IIW										
11.	Achieve	Achievements / Awards / Position										
	1. "Design and Fabrication of Solar Water Purifier" 2014-15, <b>Best Project</b> award at Fr											
		CRIT, Vashi										
	2. '	2. "Design & Development of Laser Wall Systems" 2018-19 which was awarded <b>First</b>										
	Prize in Mechanical Engineering Group (Degree) of IEI BLC Silver Jubilee Award,											
		on 28th February, 2020										
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	4. GATE 2024 – Production and Industrial Engineering Cleared (AIR 484)											
<b>12.</b>	Projects guided in UG/PG level											
	1. "Eco-Friendly Campus with Green Technology" 2011-12											
	2. "Data Acquisition System for Internal Combustion Engine" 2011-12											
		3. "Effects of Parameters on Oil content and Growth of Algae " 2012-13										
	4. "Design and Fabrication of Scissor Lift Trolley" 2012-13											
	5. "Design and Fabrication of Solar Water Purifier" 2014-15											
	6. "Design and Construction of Solar Powered Agricultural Pesticide Sprayer" 2014-15											
	7. "Design and Fabrication of Solar Desalinator" 2015-16											
	8. "Design and Fabrication of Keyway Cutting Fixture" 2015-16											
	9. "Automatic Drilling Machine" 2016-17											
	10. "Design and Fabrication of Laser Wall" 2017-18											
	11. "Design and Development of Laser Wall System" 2018-19											
	12. "Design and Fabrication of Fruit Sorting and Packaging Machine" 2019-20											
		13. "Design and Development of Thermal Battery Management System for Li ION										
		Batteries" 2020-21										
	14. "Design and Development of Water Cleaning Hovercraft" 2020-21											
	15. "Design and Development of Solar Water Heating using Plastic Waste" 2020-21											
		16. "Simulation of Manufacturing Process of a Cupboard" 2021-22										
		17. "Design and Development of Solar Panel Cleaning Robot" 2021-22										
		18. "Toothpaste Refilling Device" 2021-22										
	19 "Autonomous Mobile CNC Robot for Plasma Cutting" 2021-22											

- 19. "Autonomous Mobile CNC Robot for Plasma Cutting" 2021-22
- 20. "Road Divider Cleaner" 2022-23
- 21. "Design and Development of Thermal Battery Management System Using Liquid Cooling Method" 2022-23
- 22. "Design and Fabrication of Underwater Drone for Cargo Transportation" 2022-23
- 23. "Design and Development of App for Fastener Recognition" 2023-24
- 24. "Design and Development of Autonomous Underwater Vehicle for Cargo Transportation" 2023-24

#### 13. Short Term Training Programmes organized / attended

- 1. "Simulation of Manufacturing Systems" at Fr. CRCE, Bandra, held on 13-14 March, 2015
- "Digital manufacturing using DELMIA" in collaboration with Tata Technologies, at SPCE Andheri (W), held on 23-28 May 2016
- 3. Organized "MEMS & Mechatronics STTP" at Fr. C. Rodrigues Institute of Technology, Vashi, held on Jan 2<sup>nd</sup> to 7<sup>th</sup>, 2018
- 4. "Additive Manufacturing Digital Transformation" organized by 3D Engineering Automation LLP, Pune, held on 24 April 2020
- 5. "Advanced Material Characterization Techniques" organized by Department of Mechanica Engineering, Lendi Institute of Engineering & Technology, held on 28-30 May 2020
- 6. "Advanced Research Challenges in Materials Science" organized by Mechanical Department, Sri Vasavi Engineering College & JNTU, held on "1–6 June 2020.
- 7. Organized "Career in Project Management" at Fr. C. Rodrigues Institute of Technology,

- Vashi, held on 14 June, 2020
- 8. "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education(AICTE) from 14 June, 2021 to 18 June, 2021.
- 9. Yoga Session from October 13-20, 2022 held at FCRIT Vashi
- 10. IP Awareness/Training program under National Intellectual Property Awareness Mission India on January 06, 2023 held at FCRIT Vashi
- 11. NPTEL 2024 Teaching & Learning (TL) Practices for Python Programming (8 Week FDP Course) January to June 2024
- 12. NPTEL 2024 Welding Application Technology (8 Week FDP Course) Jul-Sep 2024
- 13. NPTEL 2024 Introduction to Machine Learning (8 Week FDP Course) Jul-Sep 2024

# 14. List of Journal Papers Published

- 1. Deepak Devasagayam (2014) "Solar Water Purifier", International Journal of Innovativ Research in Advanced Engineering (IJIRAE).
- 2. Deepak Devasagayam (2015) "Solar Energy Based Purification of Sea Water A Detailed Review", International Research Journal of Engineering and Technology (IRJET).
- Deepak Devasagayam (2015) "Design and Construction of Solar Powered Agricultura Pesticide Sprayer", International Journal of Innovations & Advancement in Compute Science (IJIACS).
- 4. Deepak Devasagayam (2016) "Solar Desalinator", International Research Journal o Engineering and Technology (IRJET).
- Deepak Devasagayam (2016) "Design and Fabrication of Keyway Cutting Fixture" International Research Journal of Engineering and Technology (IRJET).
- Deepak Devasagayam (2017) "Design and Fabrication of Automatic Wood Drilling Machine", International Journal of Engineering Technology Science and Research (IJETSR) ISSN 2394 – 3386 Volume 4, Issue 4, April 2017

## 15. List of Papers Published in National and International Conferences

- 1. Nilaj Deshmukh & Deepak Devasagayam (2012) "Data Acquisition System for Internal Combustion Engine" Proceedings of Third Biennial National Conference on Nascent Technologies (NCNTE)
- 2. Bipin Mashilkar & Deepak Devasagayam (2012) "Eco-Friendly Campus with Green Technology" Proceedings of Third Biennial National Conference on Nascent Technologies (NCNTE)
- 3. Deepak Devasagayam (2013) Effects of Parameters on Oil content and Growth of Algae International Conference on Advances & Futuristic Trends in Mechanical and Material Engineering 2013, at Punjab Technical University
- Deepak Devasagayam (2017) "Design and Fabrication of Automatic Wood Drilling Machine" International Conference on Advanced Trends in Engineering (ICATE-2017) Sponsored by The Indian Society for Technical Education (ISTE)
- Deepak Devasagayam (2018) "Design and Fabrication of Laser Wall System" International Conference on Frontiers in Engineering, Applied Sciences and Technology (FEAST 2018) April 27th & 28th, 2018 at NIT, Tiruchirappalli
- Deepak Devasagayam (2018) "Design of Modular Multi-Junction PV Concentrator Array International Conference on Frontiers in Engineering, Applied Sciences and Technolog (FEAST 2018), April 27th & 28th, 2018 at NIT, Tiruchirappalli
- 7. Deepak Devasagayam (2019) "Design, Fabrication & Testing of Cooling System for Multi-Junction CPV Cells," 2019 International Conference on Nascent Technologies in Engineering (ICNTE 2019), January 4-5, 2019, at FCRIT, Vashi, Navi Mumbai, India, 2019, pp. 1-7
- 8. Deepak Devasagayam (2019) "Design & Development of Laser Wall System", 2019, 6th International Conference On Production and Industrial Engineering (CPIE-2019), at Dr. B.R. Ambedkar National Institute of Technology, Jalandhar, Punjab, INDIA, 8-10 June 2019
- 9. Deepak Devasagayam (2019) "Design & Development of Fruit Sorting and Packaging Machine", 2019, 5th International Conference on Industrial Engineering (ICIE-2019) At: Surat NIT, 12-14 Dec 2019, pp 875-879
- 10. Deepak Devasagayam (2022), "Analysis of Thermal Battery Management Systems for Lithium-Ion Battery Cell", 20th ISME Conference on Advances in Mechanical Engineering, IIT Ropar Punjab, 19<sup>th</sup>- 21<sup>st</sup> May 2022, pp 458-463

- 11. Deepak Devasagayam (2023), "Development of a Portable Rapid Prototyping Machine Based on Fused Deposition Modeling Process", 7<sup>th</sup> International Conference on Production and Industrial Engineering (CPIE-2023), Dr. B R Ambedkar National Institute of Technology Jalandhar, March 10-12, 2023 pp 43
- 12. Deepak Devasagayam (2023), "Road Divider Cleaner", 7<sup>th</sup> International Conference on Production and Industrial Engineering (CPIE-2023), Dr. B R Ambedkar National Institute of Technology Jalandhar, March 10-12, 2023 pp 129
- 13. Deepak Devasagayam (2023), "Solar Panel Cleaning Robot", 5th Biennial International Conference on Nascent Technologies in Engineering (ICNTE), FCRIT, January 20 21, 2023, pp 1
- 14. Deepak Devasagayam (2024), "Thermal Management of Battery System Using Liquid Cooling Method", Proc. of International Conference on Mechanical Engineering & Technology (ICMET-2024), NIT Kurukshetra, Haryana, India, 1st to 3rd March, 2024.
- 15. Deepak Devasagayam (2024), "Design and Fabrication of Underwater Drone for Cargo Transportation", Proc. of International Conference on Mechanical Engineering & Technology (ICMET-2024), NIT Kurukshetra, Haryana, India, 1st to 3rd March, 2024.

### 16. International Conference Technical Program Committee Member / Reviewer

- 1. ICNTE 2019 Reviewer, held on January 4-5, 2019
- 2. ICNTE 2021 Reviewer, held on January 15-16, 2021
- 3. INVEST 2022 Organizing Committee, held on December 9 -10, 2022

#### 17. Patents

- 1. Convertible wheelchair having removable side frames, United States US 8196950 B2, Issued June 2012
- 2. Examination table, United States 7774873, Issued August 2010
- 3. Patient examination system US7665166 B2, United States US7665166 B2, Issued June 2006
- **4.** Toothpaste Refiller India Patent Published 23 Feb 2022, Application No. 202221009678