Curriculum Viate of Dr. Makwana Gautam Durlabhji

GENERAL INFORMATION:

1. Name: Dr. MAKWANA GAUTAM DURLABHJI
2. Present Employer: Associate Professor,
GTU-Graduate School of Engineering and Technology,
Gujarat Technological University,
Chandkheda, Ahmedabad
Email ID : asso_gautam_makwana@gtu.edu.in, gmakwana@gmail.com
Contact Details: 9067575820

EDUCATIONAL QUALIFICATIONS (Starting with highest degree obtained):

Sr. No.	Examination /Degree	Name of Board/ College/University	Percentage of Marks/Final Grade	Discipline/ Subject(s)	Year of Passing/ award
1	Ph.D.	Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), Gandhinagar	-NA-	Information & Communication Technology (EC)	August 2016
2	M.E.	Indian Institute of Science (IISc), Bangalore	6.3/8.0	Telecommunication	2009
3	B.E.	S. V. Regional College of Engineering (SVNIT), South Gujarat University, Surat	74 %	Electronics	1998
4	H.S.C.	Gujarat Higher Secondary Education Board, Gandhinagar	76%	-NA-	1994
5	S.S.C.	Gujarat Secondary Education Board, Gandhinagar	78%	-NA-	1992

Details of Employment Experience: (In chronological order starting with the most recent)

Sr. No.	Name of Employer	Status of Institute/ University (Govt./Quasi Govt./ Autonomous etc.)	Post held/ Designation	Period of Employment		Pay band/scale and Grade Pay		Nature of duties
				From	To	Scale/ Band	Grade pay	
1	GTU-Graduate School of Engineering and Technology, Gujarat Technological University, Ahmedabad	Government	Associate Professor	28-11-2019	Till Date	Rs. 37,400/-	Rs. 9000/-	PG Teaching
2	Sankalchand Patel College of Engineering, Visnagar	Autonomous	Asst. Professor	01-11-2010	27-11-2019	Rs. 38,200/- (15600-39100)	Rs. 8000/-	UG + PG Teaching
3	Sankalchand Patel College of	Autonomous	Senior Lecturer	01-07-2006	31-10-	26,325/- (10000-	7000/-	UG + PG Teaching

	Engineering, Visnagar				2010	325-15200)		
4	Sankalchand Patel College of Engineering, Visnagar	Autonomous	Lecturer	20-07-2001	30-06-2006	9375/-(8000-275-13500)	6000/-	UG Teaching
5	Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat	Government	Adhoc-Lecturer	07-08-2000	30-06-2001	8000/-(8000-275-13500)	-NA-	UG Teaching
6	Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat	Government	Adhoc-Lecturer	04-09-1999	30-06-2000	8000/-(8000-275-13500)	-NA-	UG Teaching

Patent Granted/Published

Name of Applicant	Application No.	Type of Intellectual Properties	Date of Filing/ Date of Granting	Status of IPR
Ritisha V. Bhatt, **Gautam D. Makwana**, Devendra H. Patel	370713-001	Design Patent	12-09-2022 10-01-2023	Granted
Devendra H. Patel, **Gautam D. Makwana,** Ritisha V. Bhatt	368819-001	Design Patent	04-08-2022 25-04-2023	Granted
Gautam D. Makwana, Shailesh D. Panchal	377174-001	Design Patent	11-01-2023 02-03-2023	Granted
Devendra Patel **Gautam D. Makwana**	379247-001	Design Patent	13-02-2023 16-05-2023	Granted
Gautam D. Makwana	202321041675	Patent	22-06-2023 08-09-2023	Published

Research Articles/Papers published in Journals

1. **G.D. Makwana**, K.J.Vinoy, "Design of a compact rectangular dielectric resonator antenna at 2.4 GHz", **International Journal of Progress in Electromagnetic Research C**, Vol.11, pp.69-79, 2009, ISSN: 1937-8718,**Impact Factor: 4.735**
   www.jpier.org/PIERC/pierc11/07.09070903.pdf
2. **G.D. Makwana**, Deepak Ghodgaonkar, "Wideband Stacked Dielectric Resonator Antenna at 5.2 GHz", **International Journal of Electromagentics and Application**, published by Scientific and Academic Publishing, USA, Vol.2, No. 3, pp. 41-45, May 2012. ISSN:2168-8045, , **H-Index: 21 (By SJR: Scimago Journal & Country Rank)**. http://article.sapub.org/10.5923.j.ijea.20120203.04.html cited in 12 US patents: 1) US9667317 B2 (May 30, 2017), 2) US9674711 B2 (June 6, 2017), 3) US9385992 B2 (June 20, 2017), 4) US9705561 B2 (July, 11, 2017), 5) US9722318 B2 (Aug 1, 2017) 6) US9729197 B2 (Aug 8, 2017), 7) US9735833 B2 (Aug 15, 2017), 8) US9742462 B2 (Aug 22, 2017), 9) US9742521 B2 (Aug 22, 2017), 10) US9748626 B2 (Aug 29, 2017), 11 US97499053 B2 (Aug 29,2017)
3. **G. D. Makwana**, Deepak Ghodgaonkar. "Dielectric Resonator Antenna as a RFID Tag for Human Identification System in Wrist Watch", **International Journal on Smart Sensing and Intelligent Systems**, Vol. 6, No. 3, pp. 1153-1166, June 2013, ISSN: 1178-5608, **Impact factor: 0.82**,Published by Massey University, New Zealand, **H-Index: 13(By SJR: Scimago Journal & Country Rank)**, Index by SCOPUS, Engineering Village, Inspec Database, Chemical Abstracts, JournalSeek Database, DOAJ Directory of Open Access Journal, EBSCO.
   http://s2is.org/Issues/v6/n3/papers/paper19.pdf.
4. **G.D. Makwana**, Deepak Ghodgaonkar, Sanjeev Gupta, "Investigation of a New Radiating Mode in Rectangular Dielectric Resonator Antenna: Experimental Validation", **International Journal of Microwave and Optical Technology**, Vol. 9, No. 6, pp. 309-316, July, 2014, ISSN: 1553-0396, **H-Index: 4 (By SJR: Scimago Journal &**

Country Rank) Index by SCI, SCOPUS, Google, EI-Compendex, EBSCO, ISI, Elsevier, Media Finder, **Journal Impact: 0.31**, http://www.ijmot.com/VOL9NO4.ASPX

5. **G.D. Makwana**, Deepak Ghodgaonkar, Sanjeev Gupta, "Dual mode and miniaturized rectangular dielectric resonator antenna with a simple feeding scheme", **International Journal of RF and Microwave Computer-Aided Engineering**, Vol. 25, No. 3, pp. 229-235, March 2015, ISSN: 1099-047X, **Impact Factor: 0.524** & H-Index: 29 (By SJR: Scimago Journal & Country Rank)
   http://onlinelibrary.wiley.com/doi/10.1002/mmce.20853/pdf
6. Niru Desai, **G.D. Makwana**, "Space diversity for wireless communication system- A Review", **International Journal of Engineering Science and Innovative Technology**, Vol. 2, Issue 03, pp. 405-410, March, 2013. ISSN: 2319-5967.
7. Jay S. Sharma, **G.D. Makwana**, "Intelligent Crop Management System for Greenhouse Environment", **International Journal of Science and Research (IJSR),** Vol. 2, No. 4, pp. 205-208, April, 2013, ISSN: 2319-7064, **Impact factor: 6.39**.
8. Rushit K. Chokashi, **G.D. Makwana**, "Digital Watermarking: Techniques, Applications, Attacks", **International Journal of Engineering Development and Research**, Vol, 1, No. 3, pp.1-5, December- 2013, ISSN: 2321-9939, **Impact factor: 4.98**.
9. B. J. Dave, **G.D. Makwana**, "A review on design, development and performance analysis of the vacuum feedthrough for ADITYA Tokamak", **International Journal of Engineering Development and Research**, Vol. 2, No. 1, pp. 225-229, 2014, ISSN: 2321-9939, **Impact Factor: 4.98**
10. Rushit K. Chokashi, **G.D. Makwana**, "Comparative Analysis of Digital Image Watermarking using DCT and DWT", **STM Journals, Journal of Communication Engineering and Systems**, Vol-4, No 1, pp. 359-363, April-2014, ISSN: 2249-8613.
11. Hardik B. Patel, **G. D. Makwana**, "Design and Simulation of Compact Wideband Rectangular Dielectric Resonator Antenna using Double Metallic Strips for Ku-Band Applications", **Journal of Microwave Engineering & Technologies**, Vol. 1, No. 1, pp. 11-20, May 2014, ISSN: 2349-9001.
12. Hardik B. Patel, **G. D. Makwana**, "Design and simulation of compact wideband rectangular dielectric resonator antenna for satellite applications", **International Journal for Scientific Research & Development**, Vol. 2, No. 09, pp. 198-202, 2014, ISSN: 2321-0613, **Impact Factor: 2.39.**
13. Yogi Mayuri, **G.D. Makwana**, "A review on dual narrowband in dielectric resonator antenna", **International Journal of Advanced Technology in Engineering and Science**, Vol. 3, No. 01, pp. 1321-1325, March 2015, ISSN: 2348-7550, **Impact Factor: 2.87.**
14. Patel Rutu M, **G. D. Makwana**, "Wideband monopole/dielectric resonator antenna- a review", **International Journal of Advance Research in Science and Engineering**, Vol. 4, No. 1, pp. 1224-1230, March 2015, ISSN: 2319-8354, **Impact Factor: 2.87.**
15. Janki H. Patel, **G.D. Makwana**, "Study, simulation and implementation of coarse and fine delay for satellite link emulation", **International Journal for Scientific Research & Development**, Vol. 3, No. 4, pp. 1515-1520, 2015, ISSN: 2321-0613, **Impact Factor: 2.39.**
16. Chaudhary Nikita, **G.D. Makwana**, "Bandwidth improvement of rectangular dielectric resonator antenna", **International Journal for Scientific Research & Development**, Vol. 3, No. 4, pp. 147-149, 2015, ISSN: 2321-0613, **Impact Factor: 2.39.**
17. Halak Upadhyay, **G.D. Makwana**, "Hybrid dielectric resonator antenna using cylindrical and conical shaped ring resonator excited by a monopole for improve ultra-wide bandwidth", **International Journal for Scientific Research & Development**, Vol. 4, No. 2, pp. 1911-1913, April, 2016, ISSN: 2321-0613, **Impact Factor: 2.39**.
18. Chaudhary Jagdish, **G.D.Makwana**, "Miniaturize microstrip patch antenna width DGS technology **", International Journal for Scientific Research & Development**, Vol. 4, No. 4, pp. 1046-1049, 2016, ISSN: 2321-0613, **Impact Factor: 2.39.**
19. Jaykumar G. Patel, **G.D.Makwana**, "Investigation of oversized wave transport system for microwave reflectometry for SST-1 Tokamak", **International Journal for Scientific Research & Development**, Vol. 4, No. 3, pp. 1702-1706, 2016, ISSN: 2321-0613, **Impact Factor: 2.39**
20. Kirankumar A. Solanki, **G. D. Makwana**, "Study and Analysis of Microstrip Patch Array at 12 GHz for 5G Applications", **Journal of Electronics and Communication Systems,** Vol. 3, No. 3, pp. 1-10, March, 2018
21. Seema M. Soni, G. D. Makwana, "Multiband Microstrip Patch Array Antenna for 5G Communication", **Journal of Applied Science and Computations**, Vol. 6, No. 4, pp. 2142-2152, April, 2019, ISSN: 1076-5131.
22. Devendra H. Patel**, G. D Makwana,** Multiband Antenna for 2G/3G/4G and Sub-6 GHz 5G Application using Characteristics Mode Analysis**, Progress In Electromagnetics Research M, Vol. 115, 107-117, 2023**
23. Devendra H. Patel. **G. D. Makwana,** Multiband Antenna for GPS, IRNSS, Sub-6GHz 5G and WLAN Applications**, Progress in Electromagnetics Research M, Vol. 116, 53-63, 2023, Index – WoS**
24. Devendra H. Patel. **G. D. Makwana** , A Comprehensive Review on Multi-band Microstrip Patch Antenna Comprising 5G Wireless Communication, **Internation al Journal of Computing and Digital Systems**, No.1, 941-953 (Feb-2022)

25. Pravin Dalvadi1, Amrut Patel2, D. H. Patel3, **G. D. Makwana**, Design of Wideband Bowtie Antenna using Tapered Balun for Industrial, Scientific and Medical Band Application, **International Journal of Information Technology and Electrical Engineering**, Volume 10, Issue 3, June 2021

Conference Proceeding/ Publications

1. **G.D. Makwana**, K.J. Vinoy, "A Microstrip line fed Rectangular Dielectric Resonator Antenna for WLAN Application" , **Presented at IEEE International Symposium on Microwave**, Dec.2008, pp. 299- 303, Bangalore
2. **G.D. Makwana**, K. J. Vinoy, "Wideband microstrip fed stacked rectangular dielectric resonator antenna for WLAN applications" **Presented at The 2009 International Symposium on Antenna and Propagation-(ISAP 2009)**, 20-23 October'2009, Bangkok, Thailand, pp. 963-966,http://ap-s.ei.tuat.ac.jp/isapx/2009/pdf/1332.pdf
3. **G. D. Makwana**, Deepak Ghodgaonkar. "Dielectric Resonator Antenna as a RFID Tag for Human Identification System in Wrist Watch" **Proceeding of 6th International Conference on Sensing Technology (ICST-2012)**, 18-21, December, 2012, pp. 238-242 organized by Massey University, New Zealand & C-DAC, Kolkata, **published in IEEE Explore with an IEEE catalog number (CFP1218E-CDR) and ISSN (978-1-4673-2254-4).**
4. Harshil S Patel, **G. D. Makwana**, "Analysis & performance improvement of various routing protocols for ad hoc network", **Proceeding of National Conference on Innovative & Emerging Technologies (NCIET-2013)**, pp. 416-420, ISSN 978-81-925650-0
5. **G.D. Makwana**, Deepak Ghodgaonkar, Narrowband square dielectric resonator antenna, Presented at **International Workshop on Antenna Innovations and Modern Technologies (iAIM- 2015)**, 26-27 December, 2015 Organized by IEEE AP/MTT Gujarat Chapter, IEEE Gujarat Section, Ahmadabad
6. **G. D. Makwana**, Jaykumar G. Patel "Investigation of power efficient oversized waveguide at 26.5 GHz to 40 GHz for plasma measurement" Proceeding of International Conference on Technology and Management (ICTM-2017), 17-18 February, 2017 organized by S. P. College of Engineering, Visnagar, Gujarat, ISBN: 978-93-5267-370-4, pp. EC-104 to EC107.
7. **G. D. Makwana**, "Effect of substrate's height on rectangular dielectric resonator antenna" Proceeding of International Conference on Technology and Management (ICTM-2017), 17-18 February, 2017 organized by S. P. College of Engineering, Visnagar, Gujarat, ISBN: 978-93-5267-370-4, pp. EC-001 to EC-004.
8. Rutu Patel, **G.D. Makwana**, "Wideband monopole/dielectric resonator antenna – A review", presented at **International Conference on Recent Trends in Engineering Science and Management** on 15th March, 2015, ISBN: 978-81-931039-2-0, Jawaharlal Nehru University, New Delhi.
9. Yogi Mayuri, **G.D. Makwana**, "A review on dual narrowband in dielectric resonator antenna", presented at **International Conference on Recent Trends in Engineering Science and Management** on 15th March, 2015, ISBN: 978-81-931039-2-0, Jawaharlal Nehru University, New Delhi.
10. Pankaj P. Chaudhary, Deepak Ghodgaonkar, Sanjeev Gupta, **G. D. Makwana**, "Design of circularly polarized rectangular dielectric resonator antenna with finite ground planes for navigational satellite applications", Presented at Antenna Test & Measurement Society (ATMS), India, 6-8 February, 2017, Hyderabad, India
11. Maulik b. Rami, **G. D. Makwana**, "A review on Antenna for 5G Networks" Proceeding of International Conference on Technology and Management (ICTM-2017), 17-18 February, 2017 organized by S. P. College of Engineering, Visnagar, Gujarat, ISBN: 978-93-5267-370-4, pp. EC-074 to EC-077
12. Hardik S. Patel, **G. D. Makwana**, "Design of ultra wide band microstrip patch antenna for wireless application" Proceeding of International Conference on Technology and Management (ICTM-2017), 17-18 February, 2017 organized by S. P. College of Engineering, Visnagar, Gujarat, ISBN: 978-93-5267-370-4, pp. EC-025 to EC-027
13. Pankaj P. Chaudhary, Deepak Ghodgaonkar, Sanjeev Gupta, **G. D. Makwana**, "Design of Compact Circularly Polarized Rectangular Dielectric Resonator Antenna with WBLC for Navigational Satellite Applications", 2nd International Conference on Antenna Innovations & Modern Technologies for Ground, Aircraft and Satellite Applications, during 24-26 November, 2017, Bangalore, India & Published in IEEE Explore with catalog number 978-1-5386-0646-9/17, 2017.
14. Grishma Jani, **G. D. Makwana**. Shailesh D. Panchal, A Comparative Survey of Multiband Planar Antennas Comprehending Emerging 5G Wireless Communication Trends, 2nd Multidisciplinary International Conference: GTU-ICON, 2022, 221-238, September, 2022.
15. Devendra H. Patel, **G. D. Makwana**, Triple-band Antenna for GPS, Sub-6 GHz 5G, and WLAN Wireless Application, Presented at Wireless Antenna & Microwave Symposium (WAMS- 23), June 07-10, 2023, Pandit Deendayal Energy University, Gandhinagar, India, to be published in IEEE Explore

Research Projects Undertaken

Sr. No	Title/ Subject of Research Project(s)	Whether major or minor project	Date of Commencement	Date of Completion	Total Grants / Funding received (Rs.)	Name of Sponsoring / Funding Agency
1	Ultra Wide Band Dielectric Resonator Antenna (DRA)	*Major	12th January, 2015	30th June, 2017	11,65,000/-	ISRO RESPOND Project 119 With Ref. No. ISRO/RES/3/665/2014-15 dated July, 16,2017
2	Investigation, Analysis of Multiband Array Antennas for 5G Mobile Handset in IoT Application	**Major	16th September, 2020	15th September, 2023	20,70,000/-	GUJCSOT/2020-21/1262 dated 16th September, 2020

** As a Principal Investigator, * Involved as a researcher,

Research Guidance: Number of scholars who have been awarded M.E./Ph.D. degree or Guiding M.E/Ph.D under my supervision

Name of Degree	Guiding	Awarded
(i) M.E Degree	02	24
(ii) Ph.D Degree:	02	-NA-

Granted Conducted and Activities organized (Conference/Workshop/seminar/)

No	Activity Type	Approved / Sponsored	Title	Duration	Sponsorship (If Any)
1	National Conference	GUJCOST, Gandhinagar	National Conference on Technology and Management (NCTM-2012)	20-21 January, 2012	Rs. 75,000/-
2	National Workshop	Automation System Pvt. Ltd., Ahmedabad	Workshop on RF/Microwave Fundamentals and FPGA	21st April, 2012	Rs. 25,000/-
3	Workshop	IIT, Kharagpur	Two week ISTE Workshop on Signals & Systems	02-12 Jan. 2014	Rs. 1,83,500/-
4	National Workshop	GUJCOST	National Workshop on Android Application Development for Health Sector	26-28 March, 2015	Rs. 50,000/-
5	Youth Festival	GTU, Ahemdabad	Xitij-2014, GTU Youth Festival Gandhinagar Zone	17-19 Sept. 2014	-------
6	International Conference	SPU, Visnagar	1st International Conference on Technology and Management (ICTM-2017)	17-18 February, 2017	-------
7	State Level Technical Festival	SPU, Visnagar	DST-GIL sponsored 6th State level Technical Festival – "TECHENIGMA-2018"	20-21, February, 2018	Rs. 50,000/-

OTHER INTERACTION

Membership/Fellowship of other institutions/professional societies:

1. Member, Optical Society of America (OSA), 2008-2009, Type: Annual
2. Life Member, Indian Society of Technical Education, Type: Time Bound, since 2002
3. Student Member, IEEE, 2007-2009, Membership No. 90551353, Type: Time Bound
4. Member, IEEE MTT/AP Bangalore Chapter, IISc, Bangalore, 2008-2009, Type: Time Bound

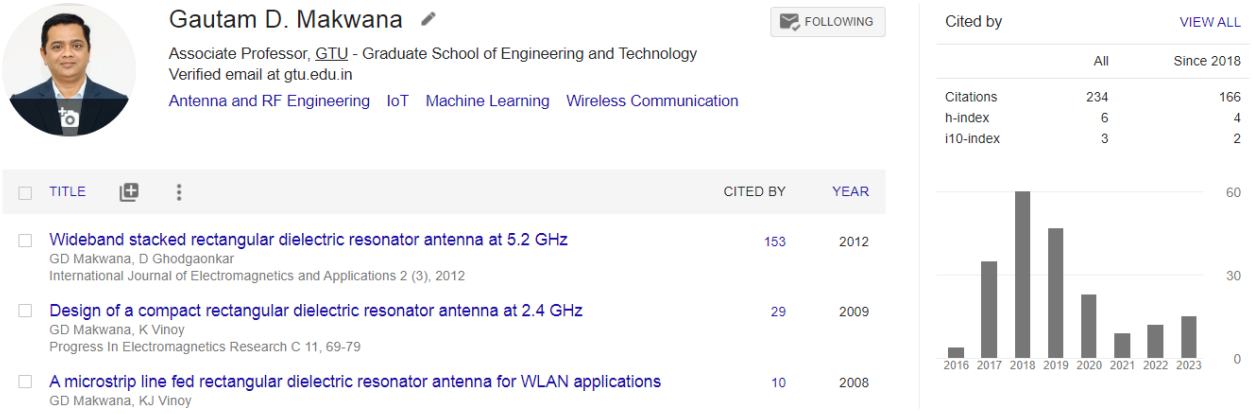
Serving as a Reviewer of following peer-reviewed international Journals

1. International Journal of Progress in Electromagnetic Research (PIER) Impact Factor: 5.298
2. International Journal of Electromagnetic Wave Application (JEMWA), Impact Factor: 2.96
3. International Journal of Electronics and Communication (Elsevier), Impact Factor: 0.588
4. International Journal of Infrared, millimeter, and Terahertz Waves (Springer), Impact Factor: 0.738
5. National Conference on Communication (NCC) jointly organized by IIT and IISc
6. Serving as reviewer for International Journals of Wireless Sensor Network, Published by Scientific Research, ISSN (online) : 1945-3086
7. Journal of electromagnetic Waves and Application, Impact Factor: 0772
8. International Journal for Innovative Research in Science and Technology, ISSN (online) 2349-6010
9. International Conference on Technology and Management (ICTM-2017) organized by SPCE, Visnagar
10. 1st International Conference on Intelligent Computing (ICIC-2018), organized by Amrita School of Engineering, bengaluru

Invited Lectures:

1. Rectangular dielectric resonator antenna, TEQIP-II sponsored National Workshop on "Emerging Trends in Electromagnetics & Its Applications, Vallabh Vidyanagar, March, 2017.
2. Intellectual Property Rights: Basics & Concepts, Ph.D. Course Work: Research Methodology & Statistics at Sankalchand Patel University, Visnagar, 9th March, 2019
3. Intellectual Property Rights: Basics & Concepts, Ph.D. Course Work: Research Methodology & Statistics at Sankalchand Patel University, Visnagar, 8th June, 2019.
4. Seminar on Sensitization of Student Startup and Innovation Policy at Sankalchand Patel College of Engineering and Shri. C. J. Patel College of Computer Studies, Visnagar on 24th June, 2019 (Computer), 28th June, 2019 (BCA), 8th July, 2019 (Electrical), 9th June, 2019 (Mechanical) and 10th July, 2019.
5. Webinar on "Perspective of Design Antenna for 5G Technology" organized by Electronics & Communication Engg. Department, Government Engineering College, Bhuj on 10th June, 2020.

Citation report of publications



Place: Ahmedabad

Sd/-

(Dr. Makwana Gautam Durlabhji)