

JSS Mahavidyapeetha JSS Academy of Technical Education

Dr. Vishnuvardhan Road, Srinivasapura post Bangalore 560060 www. Jssateb.ac.in



# FACULTY PROFILE

**Department:** Electronics & Communication Engineering

#### 1. Personal Details :

NAME	Dr.D. Mahesh Kumar	
DEPARTMENT	Electronics & Communication Engineering	
DESIGNATION	Professor	
PHONE	+919448228773	
EMAIL ID	dmaheshkumar@jssateb.ac.in	
Date of Joining(JSSATEB)	17-07-2000	

#### 2. Service Details :

#### a. Qualifications

Courses	Specialization	Year of Award	Institution	University
B.E.	Instrumentation Technology	1992	SJCE, Mysore.	Mysore University.
M. Tech.	Bio-Medical Instrumentation	1994	SJCE, Mysore.	Mysore University.
Ph.D.	Bio-Medical signal Processing	2015	JSS Academy of Technical Education.	Jain University.

### a. Teaching Experience :

Sl. No.	From	То	No. of years	Designation	Name of the Institute
1	April-1997	June-2000	3 years & 3 months	Project officer & Lecturer	J S S Polytechnic for the Differently Abled, Mysore
2	July-2000	July-2007	7 years	Lecturer	J S S Academy of Technical Education
3	July-2007	June-2015	8 years	Assistant Professor	J S S Academy of Technical Education

4	June-2015	Dec-2015	6 months	Associate Professor	J S S Academy of Technical Education			
5	Dec-2015	Aug-2020	4 years & 10 months	Associate Professor & HOD	J S S Academy of Technical Education			
6	Aug-2020	June-2022	1year & 10 months	Associate Professor	J S S Academy of Technical Education			
7	July-2022	Till date	-	Professor	J S S Academy of Technical Education			
8	Total Experience : 25 Years & 5months							

### **b. Industrial Experience:**

Sl.No	).	From	То	No. of yrs.	Designation	Name of the Company
1		Jan-1995	April-1997	2 Years & 3 Months	Engineer	Sujay Industries, Mysore

Total Experience in Years	Teaching: 27 Years	Industry: 2 Years	Research: 10 Years
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# 3. Membership in University Boards:

Sl. No.	Body	Duration	Name of the University / Institution / Organization
1	Board of Examiners	2014- 15	V T U
2	Board of Examiners	2017-18	V T U
3	LIC Member	2017-18	VTU
4	LIC Member	2018-19	VTU
5	Member of Career Advancement Scheme Experts Team (UBDT)	2017 to till date	V T U
6	Board of Studies,	2019 to 22022	V T U

# 4. Research & Publications

Papers Published in Web of Science indexed Journals	International: 06
Papers Published in SCOPUS indexed Journals	International: 08
Papers Published in other Journals	International: 14
Papers Presented in Conferences / Symposium	International: 11 National: 04

### 5. Research Guidance

		University:
PhD Guidance, (Field & University)	Yes, Bio-Medical Signal Processing,	a. Visvesvaraya Technological University, Belagavi,
PhDs / Projects Guided	Guiding: 03	Projects at Bachelor's Level: 33

#### 6. Grants:

- I. Projects
  - a. Sanctioned

Sl. No.	Title of the Project	Name of the Funding Agency	Amount in Rs.	Date of sanction	Duration	Remarks If any
1	Integrated IoT and Android Operated Versatile Battlefield Surveillance Military Application	KSCST	6000/-	23-04-2021	04 months	Completed
2	Advance Software Resources for DigitalLibrary Management and Library Automation	RRRLF, MoC, Govt. of India		06-10-2021	02 Days	Completed

## b. Submitted

Sl. No.	Title of the Project	Name of the Funding Agency	Amount in Rs.	Date of submission	Duration	Remar ksIf any
1	Faculty development program on "Artificial intelligence, industrial IoT & its applications"	VGST, Govt. of Karnataka	2 lakhs	23/02/22	One week	Submitte d
2	Faculty development program on "Artificial Intelligence and Industrial IoT"		2 Lakhs	18/02/2021	One week	Submitt ed
3	Use of Agricultural waste to power Solid Oxide Fuel cells For clean energy	KFIST L-1, VGST	15 Lakhs	19/02/2021	Two Years	Submitte d
	Design and Implementation of Hybrid Inverter for Renewable Energy- Based Smart Grid Using Machine Learning		25 Lakhs	22/03/2021	Two Years	Submitte d

5	An efficient machine learning algorithm for prediction and identification of faults in renewable energy based smart grid	AICTE-RPS- NDF	18.64 Lakhs	Two Years	Submitte d

## II. Patent Details :

SI. No.	Faculty	Title of the patent	Date of filing	Date of Published/Grant
1	Dr.D.Mahesh kumar, et.al.	"Briquet Making Machine"	21.02.22	26.04.22 (Grant)
2	Dr.D.Mahesh kumar, et.al.	"A Power quality and demand side management System for a smart grid using Machine Learning for providing efficient resource utilization and the method thereof",	17.05.2021	11.06.2021
3	Dr.D.Mahesh Kumar, et.al.	"System to Monitor temperature of granary using narrow band internet of things (IoT)"	07.03.21	12.03.21
4	Dr.D.Mahesh kumar, et.al.	"Urban Intelligent Parking Guidance System Based On Narrowband Internet Of Things (NB-IoT)"	10.02.21	19.02.21
5	Dr.D.Mahesh kumar, et.al.	"A method of Recognizing Speech and Hand Gesture in Real Time using Intelligent Adaptive interface mechanism"	10.08.20	28.08.20

# 7. Publications

# i. International Journals

Sl. No	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No.	WOS / Scopus
				Year	/ Both
1	An Adaptive Algorithm	Thejaswini P.	Information	9(1),77-90,	wos
	based authentication system	Anu .H,	technology in	ISSN:	
	for real time biometric time	D.MaheshKumar,	industry,	2204-0595/	
	attendance system,	Aravinda H.S		2203-1731.	
1					

2	NDVI Computation Of Liss- III Images Using QGIS,	Vijayalakshmi V, D Mahesh Kumar, S .C.Prasanna Kumar	Information technology in industry,	9(1), 1451-1454, ISSN: 2204-0595/ 2203-1731.	WOS
3	Design of Energy Efficient and Secured Routing Protocol for WSN in IoT,	Chetan Rajan Dongarsane, D.MaheshKumar, Aravinda.H.S., Mallikarjunaswamy.S	Design Engineering (Toronto),	(7), 3936-3953, ISSN: 0011-9342.	scopus
4	A Lab-view approach for detection of congestive heart failure,	Sharada Suresh Damball, Sudarshan B G, Dr.Mahesh Kumar D,	Design Engineering (Toronto),	(7), 3380-3390, ISSN: 0011-9342.	scopus
5	A Review for Quantifying and Assessing Salt affected Soils using Remote Sensing	Vijayalakshmi V, D.Mahesh kumar, Prasanna Kumar S. C	International Journal of Advanced Science and Technology	Volume. 29, No. 9s (2020), Special Issue, Year 2020.	Scopus
6	"Euler- Lagrangee model development for a stationary dynamical robotic system- SCARA"	Aravinda H.S, Raghunath B.H, D.MaheshKumar T.C.Manjunath.	International Journal of Grid and Distributed Computing	Volume:13, No1, Page no: 244-255, Year: 2020.	WOS/ Scopus
7	Implementation of an effective hybrid model for islanded micro-grid energy management	S.Mallikarjunaswamy N Sharmila , D.Mahesh kumar, H.N Mahendra	Indian Journal Of Science And Technology,	Volume 13, Pages 2733-2746, Year :2020,	WOS/S Copus
8	A Relative simulation study of energy Aware Routing Protocols for Wireless Sensor network	ChetanRajanDongarsane,D.Mahesh kumar ,Arvind H.S.	International Journal of Future Generation Communicatio n and Networking	Vol. 13, No. 3, pp.1996-2005, Year: 2020	WOS/ SCOPU S/Both
9	Development and Implementation of Real- Time Flex Sensor based Prosthetic Hand	Atishay.M, D.Mahesh Kumar, Nikhitha.P. Rao, Joythi. S, Afifa Parveen	International Journal of Engineering Research & Technology (IJERT)	Volume :9, Issue 04, Pages 860- 866, Year : April-2020.	-
10	Heart Rate	Sharada Suresh	International	Volume :07,	-

	Variability(HRV) Analysis: A Comprehensive Review	Dambal Sudarshan B.G, Dr.Mahesh kumar	Research Journal of Engineering and Technology	Issue: 04, Pages 2298-2306, Year 2020.	
11	Review on the Development and Implementation of Real-Time Flex Sensor based Prosthetic hand	Atishay. M, D.Mahesh Kumar, Nikhitha.P.Rao, Jyothi. S, AfifaParveen	International Research Journal of Engineering and Technology (IRJET)	Volume :06 Issue: 11, Year 2019, Pages 1-5	-
12	"Traverse-Voice Commanded Self Navigating Indoor Robot"	Vybhavi J, D.Mahesh Kumar	International Conference on Emerging Trends in Science & Technologies for Engineering Systems	May-2019	
13	I Guide and Electronic Aid for Visually Impaired	Harshitha.R D.Mahesh Kumar,		Volume 5, Page: 6—11, Year 2019.	
14	Assesment of ANS using HRV data in diseased condition	D Mahesh Kumar , S.C. Prasanna kumar, B.G. Sudarshan	International Journal of Electronics & Communicatio n Engineering& Technology	ISSN(P): 2249-6831 ISSN(E): 2249-7943 Volume: 5 Issue: 1 Page No: 43-53, Year: Feb- 2015	
15	A Study On Impact Of Alcohol Among Young Indian Population Using Hrv Analysis	D.Mahesh.kumar, Prasannakumar S.C Sudarshan B.G S.R Yadhuraj	International Journal of Computer Science, Engineering and Information Technology	Volume: 4 Issue: 4 Page No : 55-65 , Year: Aug-2014.	-

16	HRV analysis for the study of nuerological and cardiac effects of alcohol on youth of india	D.Mahesh Kumar, S. C.Prasanna Kumar B.G.sudarshan	International Journal of Computer Science Engineering & Information Technology	ISSN(P): 2249-6831 ISSN(E): 2249-7943 Volume: 4 Issue: 5 Page No: 117-123 Year: Oct 2014	-
17	Analysis of HRV to Study the Effects of Tobbaco on ANS Among Young Indians.	D.Mahesh Kumar, S.C.Prasanna Kumar, B.G.Sudarshan	International Journal of Computer Science Engineering and Information Technology Research (IJCSEITR)	Volume 5, Pages: 65-73 Year -2014	-
18	Heart Rate Variability Analysis: A Review	D.Mahesh Kumar, Prasanna kumar. S.C, Sudarshan, B.G,	International Journal of Advanced Technology in Engineering and Science	ISSN(E) :   2319-8354 .   Volume: 3 .   Issue: 1 .   Page No : .   49-64, .   Year: .   Jan-2014 .	-
19	Heart Rate Variability Is A Noisy Time Series Having Self-Similar And Self Affine Characteristic.	D. Mahesh kumar, Prasanna kumar,S.C, Sudarshan, B.G.	International Journal of Electrical and Electronics Engineers	Volume-1 ISSN- 2321-2055(E) Vol. No.1, Issue No. 2 Page No: 23-37 Year 2009	-

# ii. Conferences

Sl. No.	Title of the paper	Name(s) of Author(s)	Name of the Journal	Volume No. Issue No. Year	Publisher
1	Design of Low Power High- Speed Area Efficient Wallace Tree Multiplier using Ripple Carry Adder.	Mahendra. H.N, D.mahesh kumar	International conference on Intelligent control & computation for smart Energy & mechatronics system	Year-2020	
2	"Traverse- Voice Commanded Self Navigating Indoor Robot"	Vybhavi J	Second International Conference on Emerging Trends in Science & Technologies for Engineering Systems	May 2019	Elsevier SSRN Digital Library
3	"Performance Analysis of AES Implementation on a wireless sensor network	Chetan R D	Techno-Societal 2018	Souvenir : Proceedings of Techno-Societal 2018, pg no.50	Techno- Societal Proceedings
4	"A Survey on Diagnosis of Diabetic Peripheral	P.Praveen	ICSIPCA-2017	ISBN-13: 978-93- 5260-798-3 ISBN-10: 93-5260- 798-8	McGraw Hill Publications
5	"Cardiac Architectures: A Review		ICSIPCA-2017	ISBN-13: 978-93- 5260-798-3 ISBN-10: 93-5260- 798-8	McGraw Hill Publications
6	"Comparitive Performance Analysis of M- FSK & M-PSK Transreciever for Cognitive Radio Applications"		ICSIPCA-2017	ISBN-13: 978-93- 5260-798-3 ISBN-10: 93-5260- 798-8	McGraw Hill Publications

	"Amalgamated	ICSIPCA-2017	ISBN-13: 978-93-	McGraw Hill
7	Fault Tolerant		5260-798-3	Publications
/	Small Sensors		ISBN-10: 93-5260-	
	- Survey"		798-8	
	"IGUIDE- An	5th National Conference on	NCAIT-2019	MAT journals-
	Electronic Aid	Advancements in		Software testing
8	for Visually	Information Technology		
	Impaired			
	"NFC based	National conferences on	NCEEE-2014,	Souvenir
	patient	Electrical & Electronics	5th, june-2014,	Publications
	Identification	Engg.	HKBK College,	
9	and ward round		Bengaluru.	
	system for			
	mobile			
	devices"			
	"E-Fall and	National conferences on	NCEEE-2014,	Souvenir
10	Heart beat	Electrical & Electronics	5th, june-14,	Publications
	detection	Engg.	HKBKC,Bengaluru.	

# 8. Workshops /Conferences Attended

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	One Week Online Faculty Development Program on "Research Avenues in Health care Technology"	Dept. of EIE., JSS STU, Mysuru	21-07-2020 to 25-07- 2020
2	Five Days Online Faculty Development Program on "Sensors and Their Applications"	Dept. of ECE., Vemana Institute of Technology, Bengaluru	13-07-2020 to 17-07- 2020
3	One Week Online Faculty Development Program on "Research Proposal Writing and Opportunities in the field of Science, Engineering, and Management"	R & D Centre, Bangalore Institute of Technology, Bengaluru	06-07-2020 to 11-07- 2020
4	Short Term Course on "High Voltage Engineering: Generation, Measurement and its Applications"	Dept. of Electrical Engineering, National Institute of Technology, Kurukshetra	16-08-2018 to 20-08- 2018
5	National workshop on Accreditation Process for Technical Institutions	JSSATE, Bengaluru	26-08-2016 to 27-08- 2016.
6	One week workshop on MEMS Based Biomedical Engineering	Centre of Excellence- Microelectronics, RVCE, Bengaluru	13-06-2016 to 18-06- 2016

# 9. Workshops / Conference (Organized)

Sl.	Name of the workshop /	Organized by	Date	Role
No.	Conference			
	"Advance Software Resources for	Dept of EIE &	13/12/21 to	Convener
	Digital Library Management and	ECE, JSSATE,	14/12/21	
1	Library Automation" from 13th Dec	Bengaluru.	(2 Days)	
1	to 14th Dec 2021 sponsored by			
	RRRLF under Non-Matching			
	Scheme, MoC, GoI.			
		STEP, EIE &	15/03/2021 to	Convener
2	DST Sponsored two-week FDP on	ECE, JSSATE,	28/03/2021	
4	"Opportunities & Challenge in	Bengaluru	(14 days)	
	Entrepreneurship"			
	level Technical presentation on	EIE & ECE,	14 <sup>th</sup> Nov-2018	Convener
3	"Ideathon-18"	JSSATE,		
		Bengaluru		
		EIE & ECE,	4 <sup>th</sup> and 5 <sup>th</sup> July	Convener
4	IoT-Trends and Opportunities	JSSATE,	2018	
		Bengaluru		
	International Conference on Signal,	Dept. of ECE and	6 <sup>th</sup> and 7 <sup>th</sup> of July,	Technical
5	Image Processing, Communication	the Dept. of	2017	Chair/Convener
3	and Automation	E&IE., JSSATE,		
		Bengaluru		
		Dept. of	25 <sup>th</sup> August 2016	Coordinator
	13th State level ISTE students'	Electronics &		
6	annual convention E-	Instrumentation		
	Pravarthanahas-2K16.	Engineering,		
		JSSATE and ISTE		

# 10. Conference Attended (sponsored by AICTE / ISTE / IET / TEQIP or any other sponsoring body)

Sl. No.	Name of the workshop / Conference	Organizer	Date
1	Introduction to Microchip FPGA from	Dept of ECE, BIET,	19th to 23rd July
1		Davanagere.(ISTE)	2021,
	"Future Potential Of Digital Media"	Center for Information Science	2 <sup>nd</sup> .August
2		and Technology (CIST),	_
		University of Mysore.	
2		Dept of ECE,	13/07/2020 to
3	"Sensors & Their Applications"	VIT,Bengaluru.(IEEE)	17/07/2020.

#### 11. Details of NPTEL / COURSERA courses completed

Sl.	Name of the subject	Organized	Date of completion /	Grade /
No.		by	Award	Marks
1	Skills for new educational	NPTEL	December-2019	C/60%
1	Architecture			
2	Mathematical foundation s for	Coursera	18/05/2020	Qualified
2	Cryptography			
3	Intoduction to Machine	Coursera	12/06/2020	Qualified
3	Learning			

#### 12. Membership of Professional Bodies:

1. Life Membership in Indian Society for Technical Education (MISTE)

Dr. D. Mahesh Kumar Professor Dept. of Electronics & Communication Engineering JSS Academy of Technical Education Bangalore 560060.