CURRICULUM VITAE

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LoRa Alliance Member

Documents link: <u>https://drive.google.com/drive/folders/1KEU_1E6CFG4v2I0HqwRue3Py6DjqboUe?usp=sharing</u>

Identity:

Name	Dr.K.S.Balamurugan	Present Address:			
Father Name	K.Sathiah	Lakshmi Nagar, Gorantla,			
Date of Birth & Age	29.07.1979, 43	Guntur, AP			
Gender & Marital Status	Male, Married	Ph:+91-98659 36932			
Nationality , Religion, Community	Indian, Hindu, BC	Email: profksbala@gmail.com			
Aadhaar No.	250768803216	Description			
PAN No.	AOWPB5002P	All,Jeyabharath Home, Omatchikulam,			
Driving License No.	TN59 20100001527	Madurai, Tamilnadu-625014.			
Passport No.	S9927434				
Google Scholar link: https://scholar.g	google.com/citations?user=5cv	pUSAAAAJ&hl=en			
ORCID link: https://orcid.org/0000-0	0002-8432-0989				
Scopus Link: https://www.scopus.com	m/authid/detail.uri?authorId=5	7147186000			
Research Gate link: https://www.researchgate.net/profile/Balamurgan_Sahiah					
Linked in Link: https://www.linkedin.com/in/dr-k-s-balamurugan-sathiah-11162a150/					

Educational Qualification:

Category	Specialization	Name of the Institution / University / Board / Issuing Authority	Year of Passing	% of Marks & Class	Mode of Study
Ph.D.	ICE- Wireless	Anna university, Chennai.	2018	NA	Part Time
	Networks	SRM Valliammai Engineering College,			
		Chennai.			
P.G.	ME-Applied	Mohd.Sathak Engineering College,	2006	71%	Full Thinst
	Electronics	Keelakarai. (Anna university, Chennai).		First Class	
	MBA-System	IDE, Madras University, Chennai	2010	60%	Distance Mode
U.G.	BE-ECE	Syed Ammal Engineering College, Ramnad.	2002	76%,	Full Time
		(MK University, Madurai).		First with	
				Distinction	
Diploma	DCTech	Venkateswara Plytechnic, Pudukottai.	1999	87%,	Full Time
_	Computer Science	(State Board, Tamilnadu)		First with	
				Honors	
SSLC	State Board	Pallivasal Hr.Sec School, Mudhukulathur.	1994	65%	Full Time

<u>Certificate Courses:</u>

S.NO ·	Name of the Course	Year of Passing	Name of the Institution / University / Issuing Authority	% / Class / CGPA / Grade obtained (if applicable)
01	Python for Data Science	2022	NPTEL	Elite
02	Advanced IoT	2018	NPTEL	60%
03	Latex	2019	IIT BombayX	51% (C-Grade)
04	Machine Learning with Python	2020	IBM	NA

Teaching Experience in Engineering Colleges (Total: 18+ years)

SNo	Name of the Institution	Position / Title	Experience
1	Kapaga vinayaga College of Engineering & Technology, Chengalpattu	Professor & Head.	From 22.05.2023
2	Vignan's Lara Institute of Technology & Science, Guntur, AP.	Professor & CEO, MSME	2 years (27.09.21 to 18.05.2023)
3	Sasi Institute of Technology and Engineering, Tadepalligudem	Associate Professor	11 Months (15.10.20 to 14.09.21)
4	Bharat Institute of Engineering and Technology, Hyderabad.	Admin & HOD, Associate Professor	2 years 8 months (27.12.17 to 04.09.20)
5	Madurai Institute of Engineering & Technology, Madurai, Tamilnadu.	HOD& Assistant professor	6 years 6 months (02.06.11 to 24.12.17)
6	St.Michael College of Engineering & Technology, Kalayarkoil. Sivagangai,Tamilnadu.	Assistant professor	5 years 11 months (17.06.05 to 20.05.11)
7	Pandian Saraswathi Yadava Engineering College, Sivagangai, Tamilnadu.	Lecturer	2 years 6 months (17.06.02 to 05.11.04)

Responsibilities held: @ Collage level

SNo	Name of the	Name of the board	Outcome
	position	Committee/	
01	CEO	Incubation Centre	MSME Recommendation, 4 Lakhs GoC Received.
			Startup initiated.
02	President	IIC, MHRD.	Established IIC, EDC, NISP Cell, KAPILA & KARMA.
03	SPOC	Smart India Hackathon,	Internal Smart India Hackathon conducted.
			1 prize State level, Telangana.
04	Coordinator	UBA	Rs.4.5 Lakhs received
05	Coordinator	IQAC	NAAC C3. Got A+
06	Coordinator	Remote Centre	Established Nodal Centre, IIITH VL & IITB.
07	Member	R&D	LoRa Alliance, MoU.
08	In-charge	Centre of Excellence	Established IoT Lab
09	Coordinator	Extension Activities.	NSS,NCC Team visited -Field survey. And Camp arranged.
10	Admin i/c	Admin & HoD	Day by Day activities. Department Responsibilities.

Journal Publications: 18

Sl.No.	Title of the Paper	Publication Date	Journal name, Standard, and ISSN no
1	Conversion of seaweed waste to biochar for the	Accepted.	Environmental Research, SCI
	removal of heavy metal ions from aqueous solution:		
	A sustainable method to address eutrophication		
	problem in water bodies		
2	Influence of Sn ⁴⁺ substitution on the ZnO	July,2023	Physica B: Condensed Matter
	crystal structure and their enhanced fibre optic		SCI
	gas sensing and photocatalytic degradation		
	performance		
3	Development of C3N4 embedded BIZWOB	July, 2023	Chemical Physics Letter, SCI
	heterostructure for improved toxic cr		
4	Designing Novel Routing Algorithms for Wireless	May, 2023	International Journal of Intelligent
	Mobile Ad-Hoc Networks to Improve Their		Systems and Applications in
	Enactment		Engineering, Scopus
5	Design a Wearable IoT Devices using pressure	Dec,2020	Solid State Technology, Scopus.
	Sensors for fall avoidance by Human Movement		
	Monitoring system		
6	Performance and Estimation Error analysis for L-	01.06.2020	International Journal of Advanced
	TAS/SC Receiver over KG Fading Channels.	1 st Author	Science and Technology, Scopus
7	Agriculture Resources for Plant-Leaf Disease	28.05.2020	International Journal of Advanced
	Using Deep Learning Techniques	1 st Author	Science and Technology, Scopus
8	A Zno Nanorods Based Enzymatic Glucose	March, 2020	Obesity Medicine, Elsevier,
	Biosensor By Immobilization Of Glucose Oxidase	3rd Author	Scopus
	On A Chitosan Film		
9	LoRa-IoT Based Self-Powered Multi-Sensors	Oct,2019	International journal of scientific &
	Wireless Network For Next Generation Integrated	1 st Author	technology research, Scopus
	Farming		
10	Light-weight Process variation-aware instruction	April,2018	IJSRST, UGC Approved Journal
	distribution algorithm for Embedded GPUs	1 st Author	No : 64011
11	Log Likelihood Ratio Based Quantizer design for	Feb,2018	IJSRST, UGC Approved Journal
	target tracking in wireless sensor networks	1 st Author	No : 64011
12	An Effective Energy Power Management Using	May, 2018,	Journal of Pure and Applied
	CDCH Routing Algorithm in WSN	3rd Author	Mathematics- Scopus(2018)
13	Consumption of Low Power Using CMOS VLSI	June,2018	IJRECE, Osmania University 3 rd
	Design in Modern Trends	2 nd Author	International Conference. UGC.
14	SON based Simple Light-weight Seamless	Sep,2016	Asian Journal of information
	Handover Rapid Re-authentication Protocol for	1 st Author	technology. Scopus, ISSN:1993-
	Tactical Battlefield Wireless Communication		5994
	System		
15	"Six Sense Seamless Handover Protocol for 5G	June, 2016	Advances in Natural and Applied
	Subscribers Using Artificial Swarm Intelligence	1 st Author	Sciences. ISSN: 1998-1090
16	"Fast and Secure Intelligence Re-authentication	1 st Author	International Control Theory and
	Mechanism for Next Generation Subscribers	Nov,2016	applications. ISSN: 0974-5572

17	An Optimized Quality of Service Elements Enabling Technique for Next Generation Wireless Cellular Communication using Artificial Immune System	1 st Author	World Journal of Engineering Research and Technology, ISSN: 2454-695X
18	Fast Inter-RAT Handover Estimation for Rapid Re- Authentication using Log Likelihood Ratio Weight Factored Distribution Technique in HetNet"	Nov,2016 1 st Author	International Journal of Applied Engineering Research, ISSN :0973-4562 .

Conference Presentation: 14

Sl.No.	Title of the Paper in the Presentation	Date of Conference	Name of the Organized Institution
1	Development of quantum nanodevice for smart farming practices using machine learning with blockchain technology.	Accepted	IEEE Conference
2	AI Enable IoT-CPS Tag for Cattle care Management system	13.03.2023	Springer, NITTR Chandigarh. Scopus Indexed
3	Smart Wearable Tag for monitoring cow using Convolutional neural network and long short- term memory	03.09.2021	IEEE Xplore, RVS collage of Engineering and Technology, Coimbatore.
4	Wearable Tag for Human monitoring system	12.08.2021	Springer Conference, RVS Technical campus, Coimbatore.
5	Performance and Error Estimation Analysis of QAM with MRC Receiver for L-TAS/SC over α-μ Fading Channels.	29.07.2021	Springer Conference, Surya Engineering Collage, Erode.
6	Quality of Transmission Improvement in underwater sensor nodes using Compressive sensing	08.04.2021	IEEE Xplore,ICCMC.
7	Design a Wearable IoT Devices Using pressure Sensors for Fall avoidance by Human movement Monitoring system.	26.08.2020	VIT, Vellore.
8	Consumption of Low power using CMOS VLSI Design in modern Trends	24.06.2018	Osmania university Campus, Hyderabad
9	SON based light weight seamless handover reauthentication protocal for wireless communication system	12.03.2016	Pandian Saraswathi yadava Engineering College, Sivagangai
10	Fast Re-Authentication Mechanism for LTE- FEMTOCEL Network	14.03.2015	Pandian Saraswathi yadava Engineering College, Sivagangai.
11	Design a Multilinear regression based vertical handover algorithm for Next generation subscriber	05.04.2014	SRM Valliammai Engineering College, Chennai.
12	Fast and Secure Re-Authentication for Next Generation Networks	09.01.2013	Sasurie College of Engineering, Vijayamangalam.
13	VLSI implementation of Soft output MIMO detector based on Distributed M-Algorithm through Trellis Diagram	16.03.2011	KLN College of Engineering Technology, Madurai
	Implementation of Digital Signature based RSA Assumption	18.12.2010	Sri Eshwar College of Engineering, Coimbatore.

Book Chapter Publications: 02

Sl.No.	Title of the Book Chapter	Year of Publication	Name of Book title, Publisher
1	Deep Learning Techniques for Biomedical Image	05.08.20	Deep Neural Networks for Multimodal
	Analysis in Healthcare		Imaging and Biomedical Applications,
			31-46, 2020, IGI Global publishers.
2	Graphene-Carbon Nanotubes Nanocomposite	30.08.20	Graphene-Based Electrochemical
	Modified Electrochemical Sensors for Toxic		Sensors for Toxic Chemicals,82, 211-
	Chemicals		242, 2020, Materials Research
			Foundations.

Patents: 08

Sl.No.	Title of the Invention / Innovative Concept / Product / Project	Details of Patent Published	Year
1	Waste Food Management system with Machine Learning Mechanism of Renewable Source of Energy	202341018630, Published	March, 2023
2	Artificial Intelligence Enabled Multiple Sensor fall care system for elders	202241052932, Published	Nov, 2022
3	Artificial Intelligence Enabled Multiple Sensor Data Wearable System for Woman Safety	202241045671, Published	Aug,2022
4	Mobile Based Application for Automatic Irrigation and Fertigation	202241020224, Published	April 2022
5	Intelligence superconductor to minimize the energy band Gap.	Published	Sep 2021
6	I-Health Care: Technologies Towards 5G Networkfor Intelligent Healthcare Using IoT Notification with Machine Learning Programming.	Published	July 2021
7	Smart agriculture using IoT	Published	April 2021
8	Credit Card Fraud Prevention: Intelligent Process toCredit Card Fraud Prevention Using Machine Learning	Published.	Sep 2020.

Funded Projects:

Sl.No.	Title of the Project / FDP / Workshop / Seminar	Funding Agency	Amount Sanctioned	Project Duration & Year	Remarks
2	GoC, AICTE	AICTE	INR 4,00,000	1Year	Ongoing
3	Identification of village Issues-Survey	UBA, IITD,MHRD	Rs.50,000	01.10.2022	Completed
4	Remote HealthCare System	UBA, IITD,MHRD	Rs.100,000	12.09.2022	Hand overed
5	Identification of village Issues-Survey	UBA, IITD,MHRD	Rs.50,000	30.03.21	Completed
6	FARMGUARD -Smart Farm APP	UBA, IITD,MHRD	Rs.50,000 Rs.100,000	29.11.19 6 months	Completed
7	Identification of village Issues-Survey	UBA, IITD,MHRD	Rs.50,000	28.08.18 6 months	Completed
8	FDP/ICT-Problem Based Learning.	NITTTR Kolkata	Rs. 28400	02.12.19 to 06.12.19	66 Faculties attended.

Contributions to Institution:

SNO	Nature of work	Date	Description/Status
1	SPOC, KAVACH	April,2023	KAVACH AICTE Hackathon Organized.
2	Incubation Centre	April,2023	Established Incubation Centre, 10 Best YUKTI Project Submitted.
3	LoRa alliance	Feb, 2022	International MoU
4	Awareness Programme on Intellectual Property Rights (IPR)	Feb,2022	Appreciation Certificate Received
	under National Intellectual Property Awareness Mission (NIPAM)		
5	Institute Innovation Council IIC, MHRD @VLITS	July,2022	Established, 30+ Events conducted.
6	Institute Innovation Council IIC, MHRD @SITE	20.04.21	Established, 6 Events conducted.
7	Unnat Bharat Abhiyan(UBA)-SITE	14.02.21	Established, 50k Received.
8	MoU with LoRa Alliance -SITE	12.02.21	Established. 100+ members registered.
9	IIIT-H Virtual Lab-SITE	02.01.21	Established, 6 Lab conducted.
10	AICTE Vishwakarma Awards:2020-SITE	27.09.21	Final stage- listed team in AICTE booklet
11	IIT Bomboy Remote Centre Established	01.07.19	RC 1577, 2 Event Conducted
12	MoU with LoRa Alliance	15.01.19	For Research activities, Extended 1 years.
13	MoU with ACD Communication	17.10.19	For Research activities
14	MoU with JETSPIN	20.02.19	For Research activities
15	Unnat Bharath Abhiyan	15.04.18	Updating Rural Development activities.
16	Swachh Bharath Action Plan with MGNCRE	14.11.19	Award from Mahatma Gandhi National
			Council of Rural Education
17	AICTE Vishwakarma Awards:2019: Village	13.12.19	2 nd Round Crossed.

Membership of Professional Bodies:

Sl.No.	Name of the Professional Body	Membership Category (Member/Life Member/Fellow etc.)	Membership No.	Year of Registration
1	ISTE	Life Member	LM78891	2011
2	LoRa Alliance	Member	NA	2018
3	ISRD	Fellow	F3140901093	2018

Faculty Interaction with outside world:

Sl.No.	EVENT	Organized Institute Name	Role/ Position Held	Event Date
1	Incubation Centre Components.	Dr T Thimmaiah Institute of Technology, Banglore.	Resource Person	24.03.2022
2	Webinar on Role of IoT Engineers in POST COVID	Kalasalingam Academy of Research and Education, Virudhunagar.	Resource Person	25.06.2020

Awards & Appreciation Certificate:

Sl.No.	Name of the award/Appreciation	Name of the Agency/bodies	Held on	Status/Remarks
1	Appreciation for SIH-2022	MoE, GoI	June, 2022	3 Team Selected for 2 nd Round
2	Appreciation for Workshop Organized	NIPAM, Indian IPR. Govt of India.	04.08.2022	College level and Coordinator appreciation Certificate- Received
3	Appreciation for Guest Speakers	Dr T Thimmaiah Institute of Technology, Banglore.	24.03.2022	300 + participants appreciated.
4	Appreciation for Workshop Organized	NIT Warangal.	17.04.2022	College level and Coordinator appreciation Certificate- Received
5	Best Covid Campaign, HEI, MoE.	MGNCRE, HEI, MoE.	June,2021	College level and Coordinator appreciation Certificate- Received.
6	Workshop Coordinator Award for Conduction of Students Solar Ambassadors Workshop for celebrating 150 th MG birthday anniversary	IITB	02.10.20	College level and Coordinator appreciation Certificate- Received
7	Appreciation certificate for conductionof UBA Camp at Turkanguda.	Village President, Turkanguda.	02.10.18 to 04.10.18	Appreciation Certificate- Received

References:

	Reference 1	Reference 2
Name	Dr.B.Chidhambararajan	Dr K Phaneedra kumar
Designation	Principal	Principal
Organization	SRM Valliammai Engineering College, Kattankulathur, Chennai.	Vignan's Lara Institute Technology & Science, Guntur.
Contact No.	9443304768	9441063389
Email	dbcrajan@yahoo.com	vignanlara@gmail.com

Declaration:

I hereby declare that the information provided above is true and correct to the best of my knowledge and belief.

Date: 06.09.2023

Place: Chengalpattu.

Signature (Dr. K S Balamurugan)