National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

Curriculum Vitae

Brief Profile:

Murali K. Rajendran received the B.E. degree from the College of Engineering, Guindy (CEG), Anna University, Chennai, India, in 2013, and the Ph.D. degree in electrical engineering from IIT Hyderabad, Hyderabad, India, in 2021.
In October 2020, he joined Synopsys, Bengaluru, India, as a Senior Design Engineer. He is currently working as Assistant Professor in National Institute of Technology, Tiruchirappalli. His research interests include energy harvesting circuits for ultra-low-power systems and low-power circuit design, power management, and low-cost and ultra-low-power VLSI circuit systems.

1. Name: Dr. R. Murali krishna
2. Designation: Assistant Professor
3. Office Address:
4. Telephone (Direct) (Optional):

   Telephone : Extn (Optional):

   Mobile (Optional):
5. Email (Primary): mkr@nitt.edu Email (Secondary) : muyalkrishna@gmail.com
6. Field(s) of Specialization:
   Energy Harvesting, Ultra Low Power circuit design, Analog IC design, Mixed Signal IC design,
7. Employment Profile

Job Title	Employer	From	To
Assistant Professor	National Institute of Technology, Tiruchirappalli	November 2022	Till Date
Senior Design Engineer	Synopsys Inc.	October 2020	October 2022

Embedded Software Engineer	Delphi Automotives	August 2013	July 2014

8. Academic Qualifications (From Highest Degree to High School):

Examination	**Board / University**	**Year of Graduation**	**Division/ Grade**	**Specialization**
Doctor of Philosophy	IITH	2020	First class with Distinction	Analog IC Design, Microelectronics and VLSI, power converter design
Master of Technology	IITH	2020	First class with Distinction	Microelectronics and VLSI
Bachelor of Engineering	CEG-Anna University	2013	First class with Distinction	Electronics and Communication Engineering
HSC	SRV Higher Secondary School	2009	First class with Distinction	
SSLC	SMMS	2007	First class with Distinction	

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)

13. Details of Academic Work
(i) Curriculum Development
(ii) Courses taught at Postgraduate and Undergraduate levels
(iii)Projects guided at Postgraduate level
(iv)Other contribution(s)

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role(Supervisor/ Co-Supervisor)	Year of Award

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue

18. Invited Talks delivered

Topic	Date	Inviting Organization

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date

20. Academic Foreign Visits

Country	Duration of Visit	Programme

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
Priya Venugopal; Murali K. Rajendran; Gajendranath Chowdary	A Constant-Energy-Packet-Extraction-Based MPPT Technique With 98% Average Extraction Efficiency for Wide Range Generic Ambient Energy Scavenging Supporting 1000 × Source Resistance Range	IEEE Journal of Solid-State Circuits	Volume: 57, Issue: 10, October 2022	3150 - 3163	2022	6.12
Priya V;Murali K Rajendran; Shourya Kansal;Gajendranath Chowdary;Ashudeb Dutta	A Human Body Heat Driven High Throughput Thermal Energy Harvesting Single Stage Regulator for Wearable Biomedical IoT Nodes	IEEE Internet of Things Journal	Volume: 5, Issue: 6, December 2018	4989 - 5001	2018	10.238
Murali K. Rajendran;V. Priya;Shourya Kansal;Gajendranath Chowdary;Ashudeb Dutta	A 100-mV–2.5-V Burst Mode Constant on-Time-Controlled Battery Charger With 92% Peak Efficiency and Integrated FOCV Technique	IEEE Transactions on Very Large Scale Integration (VLSI) Systems	Volume: 27, Issue: 2, February 2019	430 - 443	2019	2.775
Pankaj Kumar Jha;Murali Krishna Rajendran;Prakash Kumar Lenka;Amit Acharyya;Ashudeb Dutta	A Fully Analog Autonomous QRS Complex Detection and Low-Complexity Asystole, Extreme Bradycardia, and Tachycardia Classification System	IEEE Transactions on Instrumentation and Measurement	Volume: 71	4009813	2022	5.332

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
Murali K. Rajendran;Shourya Kansal;Ajay Mantha;V. Priya;Y. B. Priyamvada;Ashudeb Dutta	Automated environment aware nW FOCV — MPPT controller for self-powered IoT applications	IEEE International Symposium on Circuits and Systems (ISCAS)	4	IEEE-ISCAS	Montreal, QC, Canada	2016
V. Priya; Murali. K. Rajendran; Shourya Kansal; Ashudeb Dutta	A 11mV single stage thermal energy harvesting regulator with effective control scheme for extended peak load	International SoC Design Conference (ISOCC)	2	IEEE	Jeju, Korea (South)	2016
Sumit Naikwad; Murali K. Rajendran; Priya Sunil; Ashudeb Dutta	A Single Inductor, Single Input Dual Output (SIDO) Piezoelectric Energy Harvesting System	International Conference on VLSI Design and Embedded Systems (VLSID)	6	IEEE	Hyderabad, India	2017
R P Kartheek; Akash Gupta; Murali K. Rajendran; Ashudeb Dutta	An illumination aware single solar-cell VCO CCO based charge-pump energy harvesting system for SoC integration	Asia Pacific Conference on Circuits and Systems (APCCAS)	4	IEEE	Jeju, Korea (South)	2017
Murali K. Rajendran;V. Priya;Shourya Kansal;Gajendranath Chowdhary;Ashudeb Dutta	A 100-mV–2.5-V Burst Mode Constant on-Time-Controlled Battery Charger with 92% Peak Efficiency and Integrated FOCV Technique	IEEE International Symposium on Circuits and Systems (ISCAS)	1	IEEE-ISCAS	Seville, Spain	2020

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number