






Souris Sahu

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Education

- 2021-cont.  **Doctor of Philosophy** in Microelectronics and VLSI, Indian Institute of Technology, Hyderabad, India.
Research Topic: *Battery Management System*
CGPA :9/10
- 2018-2020  **Master of Technology** in VLSI Design, Vellore Institute of Technology, Vellore, India.
Thesis Title: *VLSI/Embedded Systems Design for Improved Power-split Between Battery and Supercapacitor of Hybrid Electric Vehicle*
CGPA: 7.93/10
- 2011-2015  **Bachelor of Technology in Electrical Engineering in Electrical Engineering**, West Bengal University of Technology Kolkata, India.
CGPA: 7.96/10
- 2010-2011  **Higher Secondary (12th)** West Bengal Council of Higher Secondary Education, WB, India.
Aggregated Marks:83%
- 2009-2010  **Secondary (10th)** west bengal board of secondary education, WB, India.
Aggregated Marks:87.5%


Technical Skills

-  **Arrea of interest:**Digital System Design, Digital Signal Processing Algorithms and VLSI Architectures, Low Complexity and Low Power Design Techniques, Hardware-software co-design methodology, Real-time Battery Health monitoring for Electrical Vehicle application
-  **Programming languages:** C, Verilog
-  **Software Known:**Xilinx, Synopsis Design tools, Cadence, Mentor Graphics, MATLAB, LABVIEW

Employment History

- 2017- 2018  **Research Assistant**, Indian Institute of Technology, Hyderabad, India
Responsibilities:
 1. *Making ZnO Nano-fiber, Electro spinning, characterization, experimental planning and setup.*
 2. *Technical documentation, presentation and other research related works.*
- 2016- 2017  **Site Engineer**, Shannon Electrical Pvt. Ltd.,Mumbai, India.
Responsibilities:
Leading in- house electrical and Delivering conduiting as per CAD design.
Manpower Handling.

Academic Projects

-  **Battery Health Monitoring for accurate and real time Battery Management System for pure and Hybrid Electric Vehicle, in collaboration with ARCI, Hyderabad.**
Current status: *Completed*

Academic Projects (continued)

- **Fabrication Of ZnO Fiber For In-Situ Sensing Of Gaseous And Dissolved Oxygen: A Step Towards Early Detection Of Hypoxia**
Presented at: MNMC 2018, Koloa, Hawaii.
- **Analysis Of Ac Gain Of Multistage Common Source Amplifier Using Cntfet**
presented at: ICONN 2019, SRM University, India
- **VLSI/ Embedded Systems design for Electric/ Hybrid Vehicle Applications With Supercapacitors and Efficient Battery Management System .**
Completed as M.tech Final year project

Research Publications

Conference Proceedings

- 1 Dutt, R., Sahu, S., Sarkar, A., & Acharyya, A. (2023). Next-generation battery management system design methodology. In *2023 21st ieee interregional newcas conference (newcas)* (pp. 1–2).
doi:10.1109/NEWCAS57931.2023.10198048
- 2 Sahu, S., Dutt, R., & Acharyya, A. (2023). Battery states co-estimation methodology using dual square root unscented kalman filter. In *2023 ieee international symposium on circuits and systems (iscas)* (pp. 1–5). IEEE.
- 3 Sarkar, A., Dutt, R., Sahu, S., & Acharyya, A. (2023). Energy-efficient and high speed active cell balancing methodology for lithium-ion battery pack. In *2023 21st ieee interregional newcas conference (newcas)* (pp. 1–5). doi:10.1109/NEWCAS57931.2023.10198124
- 4 Souris, S., Rashi, D., & Amit, A. (2021). Control strategy for efficient utilisation of regenerative power through optimal load distribution in hybrid energy storage system. In *2021 ieee international symposium on circuits and systems (iscas)* (pp. 1–5). IEEE.

Area of Interest

- Battery Management System, Li-ion battery, Electric vehicle, VLSI applications, Green energy applications, Nano-Biosensors, Low power application.

Personal Information

Name: Souris Sahu

Father's Name : Mr. Sankar Prasad Sahu

Sex : Female

Languages known : Hindi, English

Permanent address : Arun Kunj, B103,58/3 bhattacharjee para lane,Howrah,WB 7111*4

Present address : References: H408, Varahamihira block, IIT Hyderabad, Kandi, Sangareddy, Telangana – 502285

Declaration:

I hereby declare that all the above mentioned facts and information are true to the best of my knowledge. I shall be solely responsible for any disparity found in them.

Place: IIT Hyderabad

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