



SAURABH KORE

M TECH (ECE WITH INTERNET OF THINGS AND SENSOR SYSTEMS)
VIT VELLORE



+91 86688 33762



Saurabhkore2017@gmail.com



<http://linkedin.com/in/saurabh-kore-5b96a216b>

A tech enthusiast who has developed a good knowledge of Embedded systems, Internet of Things and Electronics & Telecommunication systems. An advent self-learner who can acquire any skill at ease. Have a keen interest in research-oriented work related to Embedded systems, Sensor systems Modulation techniques, Communication protocols, Computer networks, IoT, and coding.

Professional training in embedded system

VECTOR INSTITUTE
2022-23

EDUCATIONAL QUALIFICATION

ECE with IoT and Sensor Systems , M.Tech

VELLORE INSTITUTE OF TECHNOLOGY,VELLORE
2022 | 8.83 GPA

Electronics and Telecommunication , B.E.

GOVERNMENT COLLEGE OF ENGINEERING, CHANDRAPUR
2019 | 8.90 CGPA

XII

JANTA VIDYALAYA, NAGBHID
2015 | 71.23%

X

JANTA VIDYALAYA, NAGBHID
2013 | 85%

MICROCONTROLLERS

- STM32L476RG
- ATmega328p
- NSA5312
- TI PGA-309
- ZSC31050
- Arduino
- Raspberry-pi

WORK EXPERIENCE

CSIR NAL on behalf of Sensohm Private Limited

Senior Application Engineer | 13-06-2024

CSIR NAL on behalf of Sensohm Private Limited

Senior Engineer | 12-06-2023 to 12-06-2024

IIT-JODHPUR

Work on semiconductor materials and Sensors for space applications | June 2022

CODING SKILLS

- C Language and Data Structure
- HAL-C

TECHNICAL SKILLS

- LabVIEW simulator
- Embedded protocols like CAN, I2C, UART,SPI,etc
- Sensor calibration
- KiCad
- Tina-ti
- Proteus circuit simulator
- KEIL Software

INDUSTRIAL PROJECTS

Integrating CAN bus output for Fluxgate current sensor (IIT-Madras and CSIR-NAL on behalf of SENSOHM PVT LIMITED)

Fluxgate current sensor family for high power applications ± 300 to ± 1500 A. Outstanding performances $\pm 0.1\%$ at 25°C and $\pm 0.5\%$ over temperature and ultra low offset. integrating CAN bus output, Suitable for state of the art high voltage battery management System application

Hall sensor(DRV5055) based Float Current measurement for battery management systems in electrified vehicles (CSIR-NAL on behalf of SENSOHM PVT LIMITED)

This can ensure a simple and reliable structure to measure the float current. This sensor has a measurement range of ± 5 A DC/AC. They are calibrated and temperature compensated for improved accuracy using multi-point temperature characterization.

Giant magnetoresistance (GMR) based Bus-bar sensor for current detection.(CSIR-NAL on behalf of SENSOHM PVT LIMITED)

GMR multilayer structure was used to develop magnetic field sensing elements. GMR sensor was then used to measure the current in the range of ± 50 A, having a sensitivity of the order of 40 mV/A using non-intrusive current sensing technology.

GMR(NAL-MRA-1427) based Gear Tooth Speed and Direction Sensor (CSIR-NAL)

GMR-based gear tooth speed and direction sensors are a cost-effective solution for various ferrous gear tooth speed sensing for automotive and industrial applications. Heart of these speed sensors is a CSIR-NAL developed giant magnetoresistance (GMR) based magnetic field gradiometer. These compact devices provide a reliable and accurate position and speed sensing.

Design, development, and performance evaluation of GMR-based current sensors for industrial and aerospace applications(CSIR-NAL on behalf of SENSOHM PVT LIMITED)

The proposed current sensor consists of a Copper bus bar, a GMR sensor chip, and a bias magnet. A GMR chip is biased with a permanent magnet to obtain linear bipolar output characteristics. The GMR chip measures the magnetic field produced in the air gap as a result of the current flowing through a conductor. The sensor design and characteristics were optimized and verified using simulation and experiments. Several prototypes were fabricated and tested for the current range of ± 200 A.

Development of High voltage Galvanic isolation sensor using STM32L476RG(CSIR-NAL)

voltage sensors are suitable for measurement of DC and AC voltages with galvanic isolation. These sensors are accurate and provide proportionate output signal to the input voltage for control electronics with high fidelity.

ACADEMIC PROJECTS

Development of smart nighttime navigation system using Automatic upper dipper lighting and sign board detection using RFID. (P.G Thesis VIT-VELLORE)

IoT solution for more advanced, smart, reliable surveillance with the use of Raspberry-pi, an RFID-based system to avoid night accidents. A research paper published in IEEE(R-10htc conference).

Smart traffic control system using RF technology. (BE, Final Year)

A smart traffic control system designed to avoid accidents with the use of an RF module, ATmega328p.

A Review: Locally Implementable Portable Communication Tower for Communication in Remote Areas.

A review paper published in the IOSR Journal with the concept of portable repeaters for modulation and amplification of signals.

CERTIFICATIONS

- Introduction to the Internet of Things and Embedded Systems an online noncredit course authorized by the University of California, Irvine and offered through Coursera.
- Python Basics online non-credit course authorized by the University of Michigan and offered through Coursera.
- Python Functions, Files, and Dictionaries an online non-credit course authorized by University of Michigan and offered through Coursera

I hereby confirm that above mentioned information is true to my knowledge.*