

Sanjana

Address

09111 Chemnitz, Germany

Email

Mobile

017688451611

LinkedIn

DOB



Work Experience

07/2024 – present

Intern

SURAGUS GmbH | Dresden, Germany

- Eddy current testing technology
- Measurement system development and analysis
- Development & evaluation and testing of algorithms to improve accuracy

07/2023 – 03/2024

Wissenschaftliche Hilfskraft

Professorship of Automatic Control and System Dynamics

Chemnitz University of Technology

- Hardware Testing of Growth box (sensor module)
- Circuit design and development of PCB to interface multiple sensors for monitoring and detecting abnormalities in the growth box
- Data logging from Things board server (IOT, Mqtt)

03/2022 – 09/2022

Intern Trainee

Cognizant | Bangalore, India

- Software Testing

08/2021 – 10/2021

Research intern

CIIRC | Bangalore, India

- Development of piezoresistive sensors on a paper-substrate using silver ink
- Testing of pressure sensors for sensitivity
- Developed system design for applications like nano weigh scales applied in nano-sciences field

Academic Career

10/2022 – Present

Degree: Master of Science in Embedded Systems

Faculty of Electrical Engineering and Information Technology

Chemnitz University of Technology | Germany

Focus:

- Smart Sensor Systems
- Design and Verification of Digital System, Test of Digital and Mixed signal circuits
- Digital Components and Architecture for Data Processing GPA: 3.39

08/2018 – 08/2022

Degree: Bachelors in Electronics and Communication Engineering

Jyothy Institute of Technology | Bangalore, India

Focus:

- Analog and Digital Electronics
- Control systems and Embedded Systems
- Digital Signal Processing
- VLSI Design, HDL GPA: 2.02

Technical Skills

Programming and Technology C | Python | Assembly Language | Embedded C | Verilog HDL

Software Proteus | KiCAD | Simulink | Matlab | LTSpice | ROS | Ansys | LabVIEW

Embedded Arduino | Raspberry | 8051 | Esp | PCB-design | Analog Circuit Design

Projects

05/2023 – 07/2023

Resistance Measurement circuit for Temperature Sensor matrix, Project lab embedded systems, TU Chemnitz, Germany.

- Investigating optimum measurement method
- Integration of Microcontroller (Arduino Uno) with Sensor matrix
- SPICE Simulation
- Software development for microcontroller

02/2022 – 07/2022

Bachelor Thesis: Industrial Automation using Industry 4.0

- Automate a Polymer Industry in Industry 4.0 standards
- Data collection, monitoring and alert system built. BLYNK platform to display data to tap production of the industry (ESP8266, Arduino, Thermocouple, Proximity sensors)
- Designed PCB to incorporate all circuitry on a single plate.

Additional Projects

- Development of nano weigh scales using Piezoresistive sensors
- Intruder Alert System using Raspberry Pi, OpenCV and Image Processing to track objects in real-time
- Multipurpose Smart mirror using Raspberry Pi
- Data logging, visualisation using MATLAB for number plate recognition
- Cattle Monitoring system – Machine Learning Model that monitors health and activity of cattle using KNN Algorithm and Logistic Regression.

Publications

“Data Acquisition and Alert System Using BLYNK Platform,” International Research Journal of Engineering and Technology (IRJET), Vol. 9, Issue 6, June 2022

Languages

English C1
German B1

Engagement and membership

01/2020 – 1/2021

IEEE Chairperson, Student Branch

- Hosted various technical activities, events, and competitions
- Participated in E-yantra, IITB Robotics challenge



10.09.2024, Chemnitz