



# KATHIR S

## ELECTRONICS ENGINEER

Expertise in VLSI, Embedded Systems, IoT, and circuit analysis, maintaining a CGPA of 8.4. I have completed 10 projects, showcasing my practical application of knowledge. Additionally, I possess skills in Artificial Intelligence and Machine Learning, enhancing my contributions. With a strong willingness to learn and adapt, I can effectively navigate new challenges across various domains.

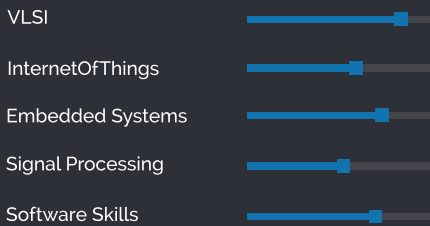
## CONTACT

+918056481769

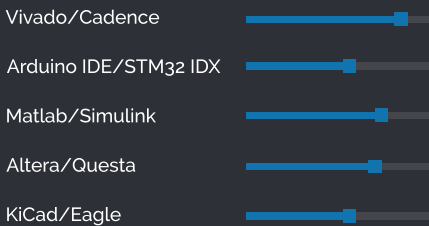
iamkathir.neocities.org/Portfolio/#  
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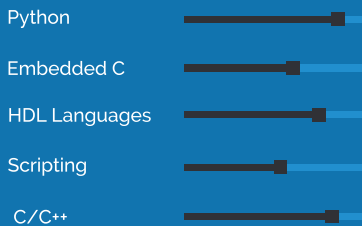
## SKILLS



## TOOLS



## PROGRAMMING



## CERTIFICATIONS

Indian Institue of Technology  
Guwahati

### SYSTEM DESIGN THROUGH VERILOG

I have successfully completed the System Design Through Verilog course via NPTEL with a consolidated score of 85% during the Jul-Sep 2024 session. This 8-week program helped me deepen my understanding of Verilog and system design, enhancing my knowledge in the field of VLSI.

Novitech R&D Pvt. Ltd.  
Coimbatore

### INTERNET OF THINGS

I completed the "Internet of Things" course at Novitech from April 8 to May 10, where I gained in-depth knowledge of embedded systems, cloud platforms, and IoT projects. The course covered hands-on experience with Arduino, Node MCU, Raspberry Pi, and explored cloud services like Microsoft Azure, Google Assistant, and

Indian Institue of Technology  
Palakkad

### VLSI DESIGN AND RECENT TRENDS

Participated in the "VLSI Design and Recent Trends" event at IIT Palakkad, where I deepened my understanding of VLSI front-end design, particularly in Verilog programming. I mastered the execution of Verilog programs, gaining valuable insights into modern VLSI design practices and the latest trends in the field.

National Institute of Electronics and Information Technology (NIELIT)  
Calicut

### VLSI FOR BEGINNERS

I successfully completed the "VLSI for Beginners" course organized by the National Institute of Electronics and Information Technology (NIELIT), Calicut. Over 5 days, I learned the basic concepts of VLSI and gained hands-on experience with 3 modeling techniques in Verilog.

## PROJECTS

### MOTION DETECTION USING SENSORS

Developed a motion detection system using an IR and PIR sensor with ESP8266 and Arduino, which sends an alert to my mobile when motion is detected within its range.

### RISC-V IMPLENTATION THROUGH VERILOG

Designed and verified a 32-bit RISC-V processor, focusing on instruction decoding, ALU operations, and control unit design. Created test benches to validate pipeline stages and optimize performance.

### ELECTRONIC AI ASSISTANT

Developed Electro AI for ECE engineers, an AI assistant that recognizes voice commands, provides basic responses, offers one-line descriptions of components, and suggests project ideas based on available components.

### SMART AUTOMATION USING IOT

Developed a smart home automation system using ESP8266 and Telegram. The system lists all home appliances in the Telegram app, allowing users to select and control them. When an appliance is turned on, the ESP8266 triggers the relay, automating the appliance.

## EDUCATION

### SGMHSS School HIGHER SECONDARY

I completed my schooling at SGMHSS, achieving 92.83% in 12th grade and 94.2% in 10th grade under the Tamil Nadu Board of Education.

### Anna University Regional Campus BE - ECE

I am currently in my third year of BE in ECE at AURCC with a CGPA of 8.4 and no arrears, focusing on VLSI and IoT technologies.