

# SAKTHIMURUGAN V

ELECTRONICS AND COMMUNICATION ENGINEER

## PROFESSIONAL SUMMARY

An Enthusiastic, Proactive and Lifelong Learner with a solid foundation in Embedded Systems and VLSI. Thrive in collaborative environments and continuously seek to learn and adapt. Not just looking for a job but also ready to learn, grow, adapt and make an impact.

## EDUCATION

- **ADHIPARASAKTHI ENGINEERING COLLEGE - MELMARUVATHUR**  
BE - Electronics and Communication Engineering, (2022 - Present)  
CGPA - 8.53
- **SRI INTERNATIONAL MATRIC HIGHER SECONDARY SCHOOL - BIRUDUR**  
HSC (2021 - 2022)  
Percentage - 85.5  
SSLC (2019 - 2020)  
Percentage - 91.4

## INTERNSHIPS

- **NATIONAL SMALL INDUSTRIES CORPORATION - CHENNAI**  
Industrial Based Embedded Systems with AI & IOT (July, 2025 - Aug, 2025)
  - Gained hands-on experience in embedded systems, circuit simulation, and PCB design using Proteus Design Suite.
- **RETECH SOLUTIONS PVT LTD - TAMBARAM**  
Embedded Systems (Aug, 2024 - Aug, 2024)
  - Worked with microcontrollers, sensors, and interfacing techniques.

## PROJECTS

- **TRAFFIC LIGHT CONTROLLER (FSM DESIGN)**
  - Implemented a Mealy FSM-based Traffic Signal Controller in Verilog.
  - Simulated and verified state transitions using Vivado.
- **PARAMETERIZED 4-BIT ALU**
  - Designed a flexible ALU supporting ADD, SUB, AND, OR operations.
  - Tested with multiple operand sizes using parameters and case statements.
- **COLOUR BASED PRODUCT SORTING ROBOT**
  - Built a color-based product sorting robot using sensors and microcontroller control for automated material classification

## ACHIEVEMENTS

- **SECURED ELITE PLUS SILVER MEDAL BY NPTEL**  
secured an Elite + Silver Medal in System Design Through Verilog Course.
- **SCHOOL PUPIL LEADER**  
Led events and represented students with leadership and responsibility.
- **VICE - CAPTAIN OF SCHOOL SPORTS DAY TEAM**  
Supported the team and helped achieve success through teamwork and guidance.
- **ENGLISH AND TAMIL TYPEWRITING**  
Successfully completed English and Tamil Typewriting with Distinction.

## CERTIFICATIONS

- System Design Through Verilog, NPTEL
- Introduction to Embedded Systems and Internet of Things, Coursera
- Embedded Systems Using C, EDUCBA
- Embedded Systems Design, NPTEL
- Softskill Training on Interview Readiness, NPTEL

## CONTACT

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## TECHNICAL SKILLS

- C
- Verilog HDL
- Python (Basics)
- Embedded C
- Digital Electronics
- RTL Design
- Simulation & Synthesis
- ASIC Design
- PCB Design
- UVM
- UART, SPI, I<sup>2</sup>C, CAN

## SOFT SKILLS

- Quick Learner
- Adaptability
- Active Listener
- Leadership
- Teamwork
- Time Management

## TOOLS & SOFTWARES

- AMD Vivado
- Proteus Design Suite
- Visual Studio Code
- Arduino IDE
- Wokwi
- Canva

## LANGUAGES

- English (Proficient)
- Tamil (Native)

## HOBBY

- Playing Chess
- Puzzle Games