Ragavendran RM

BACHELOR OF ENGINEERING

ELECTRONICS AND COMMUNICATION ENGINEERING

LinkedIn | portfolio | rameshragavendran1@gmail.com | +918838633196

Objective

Eager to be part of a lively workplace where I can handle interesting tasks and contribute to the organization's growth. I love learning and utilizing my skills, and I'm thrilled to bring my passion and dedication to make a positive impact on the team and the overall work environment.

Education

Course	Institutions	Year of Completion	Percentage/CGPA
B.E. Electronics and Communications Engineering	PSG Institute of Technology and Applied Research	2025	8.71(till 5th semester)
12th (HSC)	Sri Vijay Vidyalaya Matric Higher Secondary School	2021	95.3%
10th (SSLC)	Sri Vijay Vidyalaya Matric Higher Secondary School	2019	94.6%

Areas of Interest

- Embedded Systems
- Digital System Design
- Analog/Digital Electronics
- VLSI testing
- AI and ML

Skills & abilities

Languages	C/C++, Python, HTML, CSS, Verilog, SQl.
Tools	MATLAB, ORCAD PSPICE, Multisim, Android studio, Arduino IDE, ADS tool, Xilinx Vivado, LTSpice, Kicad, Esim, Cadence, Wokwi, Proteus, Keil, MPLAB_IDE, Visual Studio Code, Labview, **Microcontrollers learnt**: 8051, ARM, PIC, My RIO, Raspberry Pi 5.
Soft Skills	Communication, Leadership, Problem Solving.

Projects

Project Name	Tools used	Description
Electronic instruments tester	Arduino NANO, resistors, known Voltage supply, Display.	A Sensor-less Embedded product that can be used to test any the electrical components through a known resistance and using some circuit logic and formulae like ohm's law, KVL, KCL etc....
Automated file format classifier and Converter	Uipath Studio, Python	In the real world, converting file formats and reducing file size is essential for easy handling. This project classifies file formats and converts CSV to PDF.
Balance monitor and Healthcare monitoring system for Soldiers using Ni-MyRIO	LabView, Ni-MyRIO, Temperature Sensor, MAX30102 sensor	A hardware application designed to help soldiers monitor their health and update the main camp during adverse conditions, maintaining their stability record at crucial times.
Road Traffic Control System using OpenCV	Python, Data of the traffic, Raspberry Pi 5	Using OpenCV to monitor vehicle numbers and adjust signal patterns based on this data can efficiently reduce city traffic and waiting times at junctions.
Low Power Efficient Approximate Multiplier Design	Cadence Virtuoso	A Low Power MGDI based technique for applying a approximation based multiplication of binary inputs for efficient transistor use and power consumption.

Professional Development

Papers presented:

- Presented a Paper Titled **"Automated Classification of Chest Image Using Deep Learning"** in the International Conference under the banner of IEEE conducted by the PSG ITECH. Link: IEEE publication
- Submitted a Paper Titled "**Sustainable Low-Power ALU and Multiplexer based AI Accelerator Design and Optimization Using Cadence"** 8th IEEE ITC 2024 Conference, Bangalore.
- Submitted a Paper Titled "**Power-Efficient Multiplier Optimisation: Leveraging Approximate Designs and Modified Gate Diffusion Technique"** IC(SEC)^2 2024 conference sponsored by IEEE, conducted by PSG ITECH.

Courses

- Completed edX program based on **Python for Data Science.**
- Completed **C/C++ from beginner to expert programming** course on Udemy.
- Completed **the onramp program for image processing, app building and deep learning** on MATLAB**.**
- NPTEL course titled **"System Design using Verilog**" with certificate.
- Completed the Course of **Cloud Computing** by IBM skill up platform and **Robotics and Automation** conducted by UiPath.
- Solved many Digital Circuit problems in HDL Bits.
- Badge Holder for Python and C programming certifications by hacker rank (5 star for python and 4 star for C).

Workshops and Training

- Organized a Workshop based on **Embedded System using PIC Microcontroller** as a part of Yukta 2023.
- Organized a Workshop titled **Introduction to Internet of Things:Esp32** as a part of Yukta 2024.
- Participated in the Workshop on **Designing RF systems with ADS Tool Suite** conducted by ECE association of PSG ITECH.
- Attended a Workshop on **Embedded Systems with ARM processor** conducted by PSG College of Technology.
- Attended a Workshop on **Internet of Things and Its Application to the Industrial World** conducted by PSG Institute of Technology and Applied Research.
- Participated in the Workshop **on Analog and Digital System Design using Cadence** conducted by Entuple Technologies in association with the ECE association of PSG ITECH.
- Designed a **manual for reference** for the **Raspberry Pi 5** for interfacing analog, digital components and also for AI & ML applications.

Achievements

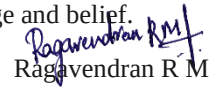
- **Finalists** for IEEE sponsored hackathon as a part of ICWITE-2022, conducted by IISc, Bangalore (Project-Bestow Builder).
- Got **Second prize** in Python Expo conducted by IETE students' chapter and ECE association in PSG ITECH.
- Got **special prize** in Arduino Expo conducted by IEEE students' chapter and ECE association in PSG ITECH.
- Reached the **Pre-Final Stage** for the idea of smart ambulance in the State level Hackathon conducted and sponsored by Eshwar College of Engineering.
- Attended the **Discover Cisco 3.0** Event organized by the Cisco companies accompanying the placements team of PSG Institute of Technology and Applied Research.
- Improved to the **implementation level stage** in Tomato Grand Challenge Conducted by the Government of India and submitted our Idea (Agriconnect-the farmer's platform) that got selected.
- Won the **Second Prize** in the Chess tournament conducted by the Anna University Zone XI division with board points of 2/2.
- Won the **Second Prize** for the best Cadence project as a part of Sristi 2024 organized and conducted by Saintgits College of Engineering, Kottayam, Kerala.
- Won the **First Prize of RS 15000/-** for **the Best Paper** under the category of circuits in the **Paper presentation** held as a part of the **Yugam 2024** event organized and conducted by Kumaraguru College of Engineering and Technology.

Co-Curricular and Extracurricular Activities

- Executive member of **ECE association** for the Year 2022-2023.
- College chess team player **(live chess rating of 1506),** Won laurels and awards in the sport of chess.
- **Class Representative** for the academic Year 2022-2023.
- Executive Member of **Coding Club** 2023-2024.
- Part of Executive Committee of **IETE students' body** 2023-2024.
- Active Member of **Eco Club**.
- Attended the **Global IEEE Madras Hub Congress Conference** held at Sri Krishna College of Technology representing PSG ITECH.
- Hobbies - Chess, Cricket, Drawing, Photography, Listening to Music.
- Languages Known – English, Tamil, Marathi, Kannada, Hindi.

Declaration

I, Ragavendran R M hereby declare that the above-mentioned information is true to the best of my knowledge and belief.



Ragavendran R M