

Vaishnav Sabari Girish

 Vaishnav-Sabari-Girish |  +91 7348847050 |  write2vaichu@gmail.com |  vaishnav-sabari-girish |  vaishnav.world |  0009-0001-7109-5970 |

Electronics and Communication Engineering final year student with solid foundation in Embedded Systems, Linux, and programming. Experienced through projects and internships, with leadership as Vice-Treasurer of Evalanche Club.

Education

Jain (Deemed-to-be) University

BACHELORS OF TECHNOLOGY IN ELECTRONICS AND COMMUNICATION ENGINEERING

India

2022 - 2026

- School of Engineering and Technology
- CGPA: 8.2

Skills

- Programming Languages** C, C++, Python, Rust, Bash, Lua, MATLAB
- Embedded Systems** Arduino, ESP32, STM32, PlatformIO, ESP-IDF, Embedded Linux
- Tools and Software** KiCad, Proteus, LT Spice, Linux Distributions, OpenSCAD
- Soft Skills** Team Work , Leadership , Problem Solving , Analytical Thinking , Adaptability
- Languages** English , Japanese , Tamil , Kannada , Hindi

Professional Experience

Depixel Tech

EMBEDDED SYSTEMS DEVELOPMENT INTERN

Bengaluru, Karnataka

August 2025 - October 2025

- Developed Embedded firmware for Smart Rings using Zephyr RTOS
- Programmed Nordic Microcontrollers using Embedded Rust, nRF Connect Extension and nRF Connect Application
- Designed PCB for the Smart Rings using KiCad, including component placement and routing optimization
- Learned how to use the Nordic Development Kit for prototyping and debugging
- Implemented low-power sleep modes and power management strategies to extend battery life for wearable applications
- Integrated sensor data collection and wireless communication protocols (Bluetooth LE) for real-time health monitoring

Apsis Solutions

EMBEDDED SYSTEMS INTERN

Bengaluru, Karnataka

January 2025 - March 2025

- Developed and optimized embedded software solutions for microcontroller-based systems, focusing on real-time applications and hardware integration.
- Implemented Machine Learning (Computer Vision) applications and Linux scripts using Python and Bash control the camera.
- Designed and programmed ESP32-based Embedded systems for Embedded applications.

LiveOut Solutions

PROMPT DESIGNER INTERN

Bengaluru, Karnataka

June 2024 - July 2024

- Coordinated multiple project timelines and deliverables using collaborative tools to ensure efficient workflow management and team synchronization using tools like Asana.
- Created and optimized AI prompts for various applications, improving response quality and accuracy for automated content generation systems.
- Produced high-quality visual content for marketing campaigns and product presentations using advanced AI-powered design platforms including Leonardo and Ideogram.
- Developed professional product mockups and prototypes for client presentations and marketing materials to enhance visual communication using Mockey.
- Built and customized online stores using Zoho Commerce with integrated payment systems, inventory management, and user-friendly interfaces for small businesses.

PANTECH Solutions

INTERN

Bengaluru, Karnataka

June 2022 - July 2022

- Used STM32-Nucleo Board to program Embedded applications and ESP32 for IoT

- Programmed various microcontroller platforms including Arduino and ARM-based systems for automation and control applications in industrial settings
- Learned fundamental PCB layout principles and component placement strategies using industry-standard design software for prototype development.

Certificates

- 2023 **C Programming for Embedded Applications**, Linkedin Learning
- 2023 **Microcontroller Embedded C Programming**, Udemy
- 2024 **Object Tracking and Motion Detection with Computer Vision**, MathWorks
- 2024 **Learning LabView**, Linkedin Learning
- 2024 **Digital Signal Processing 1: Basic Concepts and Algorithms**, EPFL
- 2024 **Digital Signal Processing 2: Filtering**, EPFL
- 2024 **VLSI SoC Design using Verilog HDL**, Maven Silicon
- 2025 **Problem Solving and Logical Reasoning**, Coursera

Projects

ARDUINO INTERACTIVE CLI

- A tool designed to simplify the transition from Arduino IDE to Arduino CLI. Features a user-friendly Text User Interface (TUI) to support beginners.

COMCHAN SERIAL MONITOR

- A blazingly fast and minimal Serial Monitor application written in Rust. Features include : Serial Monitor I/O, Serial Plotter, Writing Serial data into files

REMOTE FIELD MONITORING SYSTEM

- A field monitoring system enabling farmers to remotely track field conditions. Data is stored in the cloud and visualized through graphs and pie charts, providing clear insights into field status.
- Uses the ESP-NOW Protocol to communicate between the fields and home.
- Data is stored in ThingSpeak by MathWorks

WIRELESS WATER LEVEL MONITORING SYSTEM (COMMUNITY PROJECT)

- A water level monitor designed to enhance safety and ease during overhead water tank maintenance, with wireless data transmission to maintenance authorities.

PORTABLE WATER PURITY TESTER (PATENTED)

- **Patent Application Number:** 202341087033 A
- A portable water purity tester designed for on-the-go water quality testing.

SMART DOOR LOCK USING LI-FI

- A smart door lock utilizing Li-Fi technology for enhanced speed, security, and effectiveness, allowing doors to be unlocked using a phone's flashlight.

Publications

Vaishnav, S. G. (2023). Star Location Pointer using MATLAB. *Jnana Chilume*, 6th Annual Series of National Conferences.