

Charles Shaju

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Robotics & IoT Enthusiast | 2 Years Experience | MCA (Pursuing)

Embedded Systems Engineer with 2 years of experience currently pursuing MCA to advance expertise in computing and intelligent systems. Interested in IoT, robotics, and embedded AI.

WORK EXPERIENCE

i4 Marine Technologies Pvt Ltd • Pune, Maharastra

Aug 2023 - Jun 2025

Embedded Systems Engineer • Full-time

- Experience in Embedded Systems Development (C/C++, ESP32, Raspberry pi)
- Worked on Underwater ROVs and Autonomous surface vessels (ASVs)
- Hands-on with Sensor Integration, Motor Control, LoRa, GPS, and real-time data systems

EDUCATION

MCA in Computer Application

Rajagiri College of Social Science • Kalamassery, Kochi

Jun 2025 - Present

Calicut University in Bachelore of Vocational Studies(IT)

Christ College Autonomous Irinjalakuda • Thrissur • GPA: 85%

Aug 2020 - Apr 2023

HSS(Plus Two) in Commerce Computer Application

St. George HSS Pariyaram • Thrissur • GPA: 97%

Jul 2018 - Apr 2020

CERTIFICATIONS

Geo-Data Processing Using Python and ML

IIRS,ISRO

Mar 2025 - Present

Certificate in AI-Machine Learning Developer

ASAP Kerala

Jun 2024 - Present

SKILLS

- **Embedded Systems:** ADC/DAC, Arduino, C / C++, Microcontroller Programming ESP32, PWM, STM32
- **Communication Protocols:** I2C, LoRa, RS485/Modbus, SPI, UART, Wi-Fi
- **Sensors & Actuators:** Barometric Sensors, Depth, GPS, IMU, Motor Control, pH, Pressure, Turbidity, Temperature
- **Systems & Platforms:** BlueROV, Autonomous Surface Vessels, Raspberry Pi, MAVLink, MAVProxy, Pixhawk, QGroundControl, Underwater ROVs
- **Software Tools:** Arduino IDE, Git, KiCad, Linux / Raspbian OS, Python, VS Code