

Academic Record		
B-Tech (ECE)	APJ AK Technological University, Kerala	2020
Diploma in electronics	AKNM GPTC Thirurangadi, Chelari	2015
Class X	Govt. Vocational Higher Secondary School, Kalpakanchery	201
Academic Achievements	Among the top 10 % of students in the Lateral entry Engineering Entrance Exam (LET)	2017
Certifications	Introduction to Data Science in Python	2020
Work Experience		29 months
Sinergia Media Labs (Simelabs), Kochi		<i>Robotics Engineer</i>
Jan'21 – Present		
RELEVANT WORK EXPERIENCE		
Smart Dos 10 flex assembly line		
Sinergia Media Lab, Bangalore. Nov 2022 - Present		
<i>Robotics Engineer</i>		
Smart Dos is a Drug delivery device. In this R&D project is exploring how efficiently assemble Smart dose device using different robots arm. Experience in designing and implementing robotic automation solutions for assembly line processes.		
<ul style="list-style-type: none"> Designed robotic workcells and developed layout configurations to optimize material flow and minimize cycle times, reducing cycle times by 25% Programmed and integrated industrial robots, such as ABB YuMi robot and Omron TM900, into the FPM system, ensuring smooth and efficient operations. Collaborated with cross-functional teams including manufacturing, design, and automation to define project requirements and specifications. Conducted simulations and offline programming to validate robot paths and optimize cycle times using RobotStudio and RoboDK. 		
Fill and Finish Automation.		
Sinergia Media Lab, Ernakulam. Jun 2022 - Oct 2022		
<i>Junior Robotics Engineer</i>		
Automate the Fill and Finish process in a pharmaceutical manufacturing facility. Designed and implemented robotic systems, integrated automation equipment, and optimized production efficiency, resulting in improved product quality and reduced manufacturing time.		
<ul style="list-style-type: none"> Programmed and integrated industrial Staubli TX60 robots Using VAL3 programming language and SRS. Developed programming and control logic for the robotic systems, write the PLC program for controlling different elements using Ladder and S7- GRAPH PLC programming. Implemented industrial communication protocols, including PROFIBUS and PROFINET, for data exchange between control systems and devices. Integrated robotic arms with pneumatic systems and Schunk EGL gripper, incorporating pneumatic components such as vacuum cups. 		
IndVentr200 (i200).		
Sinergia Media Lab, Ernakulam. Aug 2021 - Dec 202		
<i>Embedded Engineer</i>		
INDVENTR-200 is an advanced ventilator from the INDVENTR line-up. The product is an affordable state of art ventilator aimed to strengthen the healthcare systems during the Covid-19 pandemic and prepare for future epidemics. As mentioned, it is designed in such a way that it can be used as an effective emergency care instrument supporting a range of pressure and volume control modes.		
<ul style="list-style-type: none"> Designed and implemented the control system for the ventilator, including hardware selection, sensor integration, and programming of the control algorithms. Write C++ program for integrating different sensor, Data send to tab and Controlling of ventilator parameters like RR, PEEP etc.. Implemented algorithms for sensor data acquisition, signal processing, and feedback control in embedded systems. PID tuning for solenoid valve. 		
The Individualized System for Augmenting Ventilator Efficacy (iSAVE)		
Sinergia Media Lab, Ernakulam. Jan 2021 - Oct 2022		
<i>Embedded Engineer</i>		
The Individualized System for Augmenting Ventilator Efficacy (iSAVE) is a novel ventilator-sharing solution for mandatory ventilation modes that allows a single ventilator to provide ventilation to at		

least two patients. Novel ventilator sharing solution that allows a single ventilator to provide ventilation to at least two patients.This is R&D project collaborative with MIT.		
<ul style="list-style-type: none"> • Worked closely with PCB designers to review schematics and PCB layouts, ensuring proper hardware-software integration. • Conducted thorough testing and debugging of embedded systems to ensure functionality, performance, and reliability. • Write C++ program for BMS and different i2c sensors. • Provided technical support to fabrication team, troubleshooting issues and implementing solutions in a timely manner. 		
Skills		
→ Robots - Abb YuMi Dual arm, Omron TM900 and Staubli TX60. → Software - Stäubli Robotics Suite, GitHub, DevOps, Robot studio, TMflow, TIA portal v15.1, Arduino IDE. → Programing Language - VAL3, Rapid programing, VAL3, C++ and Arduino → Hardware - Esp32, Arduino, 1518 siemens PLC, Push fit connector, 3D printing, Relay and Solenoid valve.		
Language	English	[Full Professional]
	Malayalam	[Native or Bilingual]
	Tamil	[Lisen skill]