Anagha John

Linkedin: https://www.linkedin.com/in/anaghajohn/ Email: anaghajohn48@gmail.com

GitHub: https://github.com/Anaghajohn Mobile: +91 9778164758

SKILLS

Languages:	C++, C, Python, SQL
Tools/Platforms:	Arduino IDE, ESP-32, proteus , Tinkercad, Solidworks, Ansys ,Logixpro, Cadence, Matlab
Soft Skills:	Problem-Solving, Team Player, Project Management, Adaptability, Multitasker, Public Speaker , social being.

TRAINING

Automate X – PLC based training for Industrial Automation Jun' 25 – jul'25

Intern

- Designed ladder logic programs using LogixPro and TwidoSuite for motor, conveyor, and process control systems, applying timers, counters, and interlocks for safe and reliable operation.
- Implemented and debugged PLC control logic in simulated industrial setups to ensure smooth and accurate system performance.
- Created and tested automation workflows that simulated real factory processes by configuring digital and analog I/O modules and optimizing control strategies based on system response.

PROJECTS

Hybrid UAV System | Sept' 25

- Designed a cooperative drone system where a fixed-wing UAV performs high-altitude wide-area scanning using AI-based detection.
- Implemented coordination between a fixed-wing UAV and a rotary drone, enabling the rotary drone to navigate to detected locations and capture close-range visual confirmation.
- Created a real-time control dashboard to display detection time and location, supporting rapid decision-making for search and rescue operations.

Smart Irrigation System | Mar' 25

- Designed a smart irrigation system using soil moisture and temperature sensors to automate plant watering.
- Implemented microcontroller-based control logic with Arduino to optimize water usage and prevent over-irrigation.
- Created an integrated sensor and pump control system as a cost-effective and eco-friendly solution for agriculture and home gardening.

Smart IOT Autoflow Well Management | Dec' 24

- Designed a pressure transducer–based instrumentation system integrated with the well cap to measure hydraulic head in artesian (autoflow) wells by converting pressure signals into calibrated water level data.
- Implemented an IoT-enabled control and monitoring unit to regulate well discharge using a smart tap mechanism, enabling remote supervision of pressure and flow parameters.
- Created an automated protection and flow regulation module using a solenoid valve and flowmeter for real-time flow measurement, emergency shutoff, and system safety.

PATENTS

Method and Apparatus for measuring Autoflow Height in Artesian Wells | Jan'25

Patent application no: IN202511047794

- IOT-enabled flow control system for Artesian Wells.
- Used ML to predict flow, mitigating landslide risks.
- Real-time monitoring for efficient water management.

CERTIFICATES

- Automate X – PLC based training for Industrial Automation — June'25
- Python Course for Beginners |Scalar — May' 24
- Complete guide to build IOT things from scratch to market| Scalar — Apr' 24

ACHIEVEMENTS

Smart India Hackathon 2024 Winner — Dec'24

- Designed a pressure transducer–based system integrated with a well cap to measure water head in autoflow (artesian) wells.
- Implemented a smart IoT-based control system with a tap mechanism to regulate water flow and monitor well pressure.
- Created an automated safety setup using a solenoid valve and flowmeter to display calculated water level above ground and support emergency control.

ISRO Agnirna Space Internship Program Participant — Aug'24

- Completed an 8-week (80-hour) internship program by Agnirna, successfully accomplishing all 440 learning and practical steps focused on space science, technology, and research applications.

EDUCATION

Lovely Professional University — Phagwara, Punjab
Bachelor of Technology — Aug' 23 – Present
Electronics and Communication Engineering; Current CGPA: 7.03

Carmel HSS Chalakudy — Chalakudy, Kerala
Intermediate — june' 20 – Mar' 22
PCM; Percentage: 94%

Crescent Public School — Chalakudy, Kerala
Matriculation — June' 19 – Mar' 20
Percentage: 79%