

Experience Certificate

This is to certify that Rithvik Chuppala has executed the following volunteer tasks for Proof of Concepts (POC) from IoT Department in Futurewei Technology, a Subsidiary of Huawei. He programmed and mechanical assembled Robotic Arm using Arduino developer's kit. A few of the issues that Rithvik could troubleshoot and came up with solutions for:

There was no instruction manual for mechanical assembly of the robot arm. Looking at the picture of the model, he figured it out and assembled the whole arm. Secondly, there were no separate batteries for multiple servo motors attached to the arm. Arduino board was the supplier of power for the arm. The power generated by Arduino board was too small for the arm to make any cognizant movement. In order to troubleshoot this problem, Rithvik tried powering it up with add-on Motor shield (spec). This too could not solve the issue of powering up the servo motors.

He then came up with a brilliant idea to solve the problem with the motors. He built a separate Capacitor circuit board between the phase and neutral of the input power. This solved the problem and the robotic arm was fully functional, and built an autonomous infrared sensor based Robotic vehicle using Arduino developer kit that tracked infrared light and followed it.

Rithvik has proven to be reliable and motivated in executing a task to completion. He shows brilliant potentials at Robotics programming and electronic circuitry and servo motors, and is extremely self-reliant. He will be an asset to any organization that takes him under its wings.

Jim Xu 