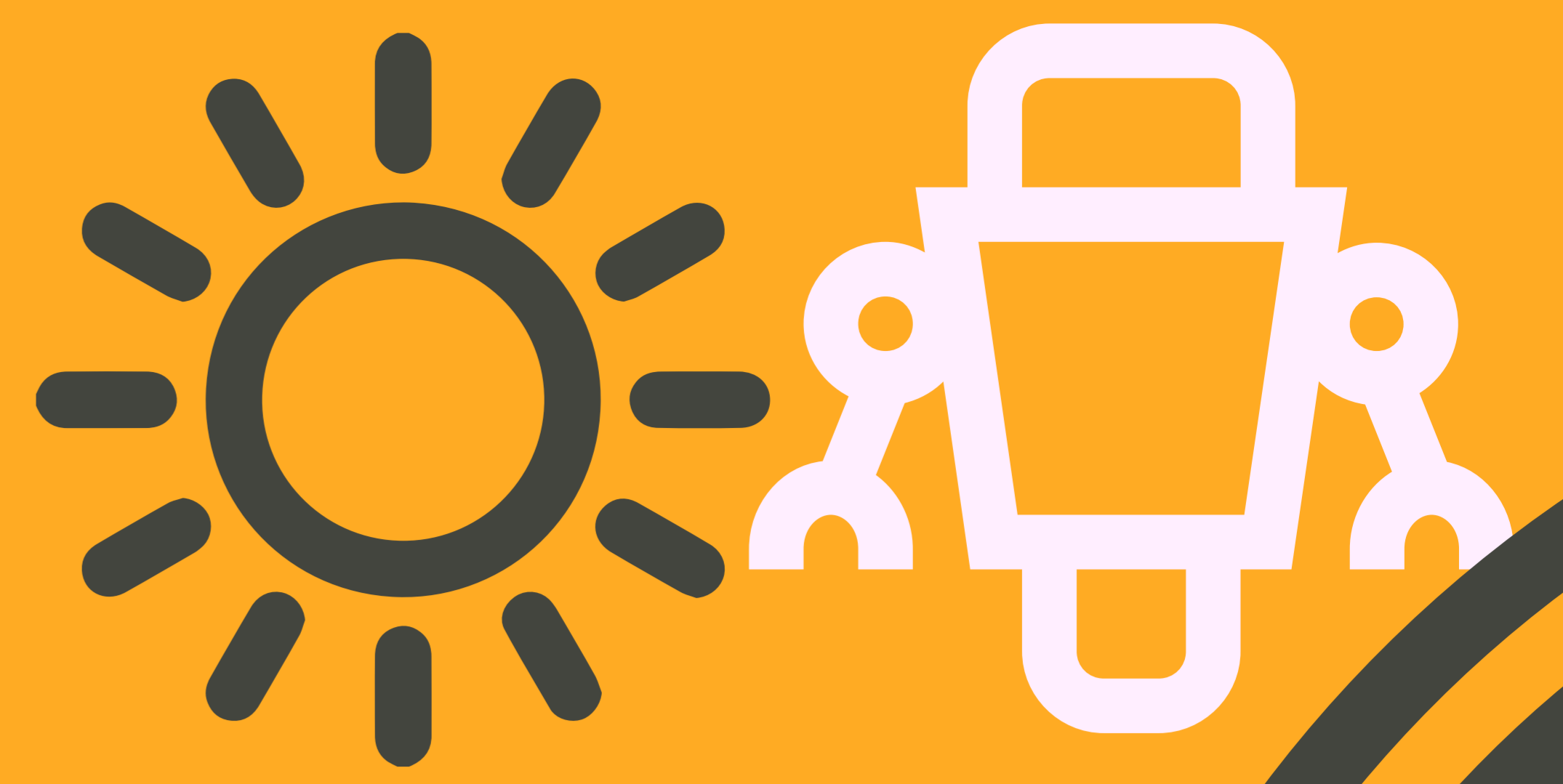


SOLAR TRACKING AND POSITIONING ROBOT

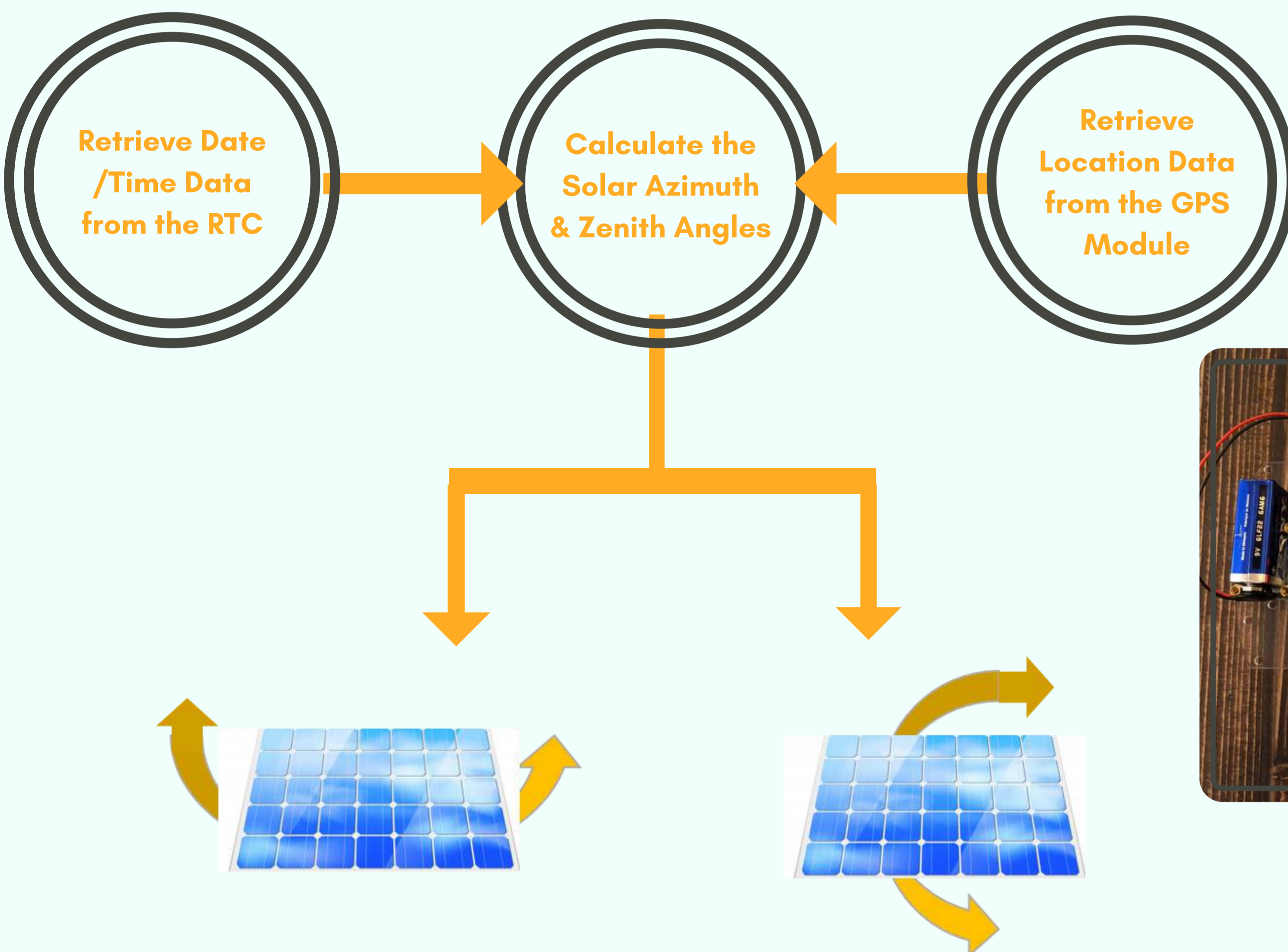


ABSTRACT

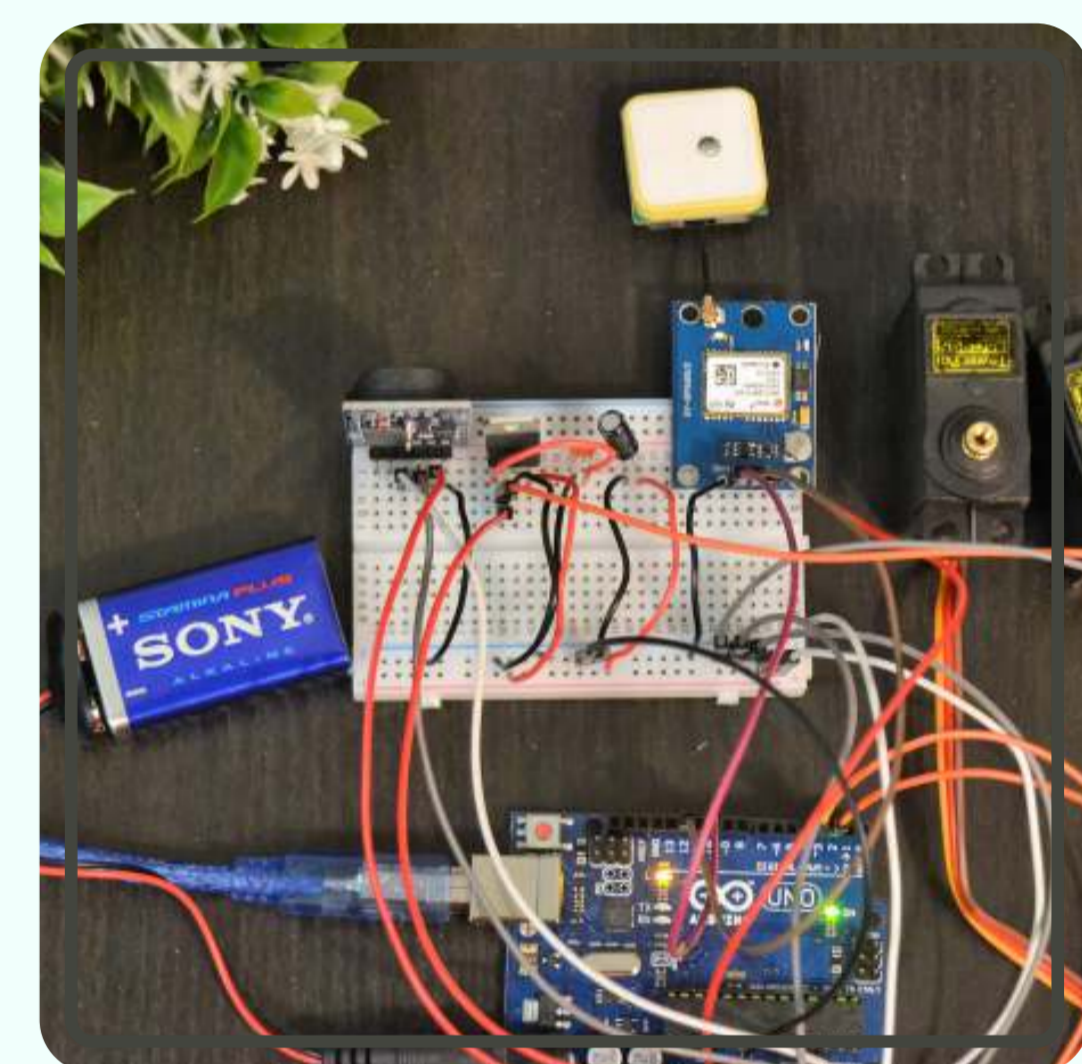
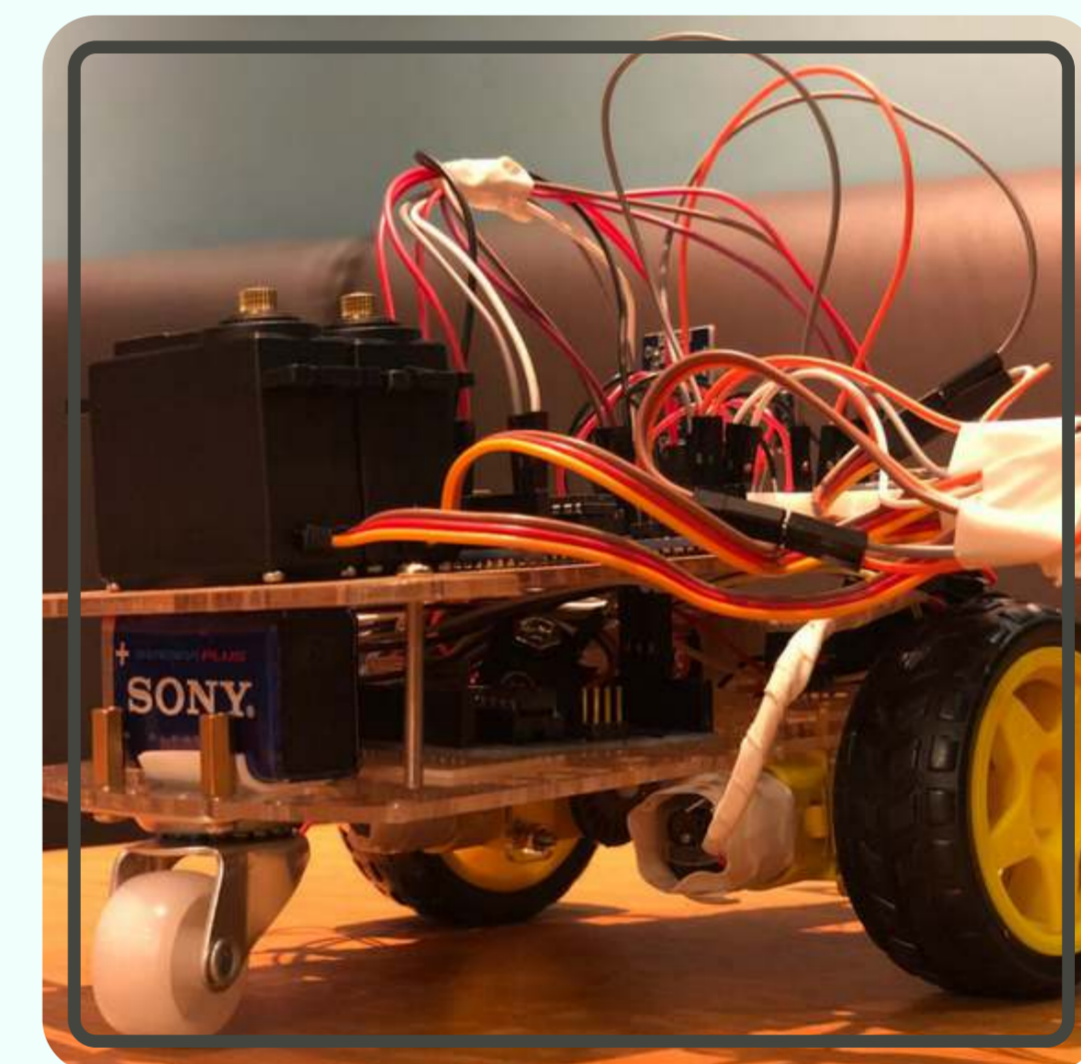
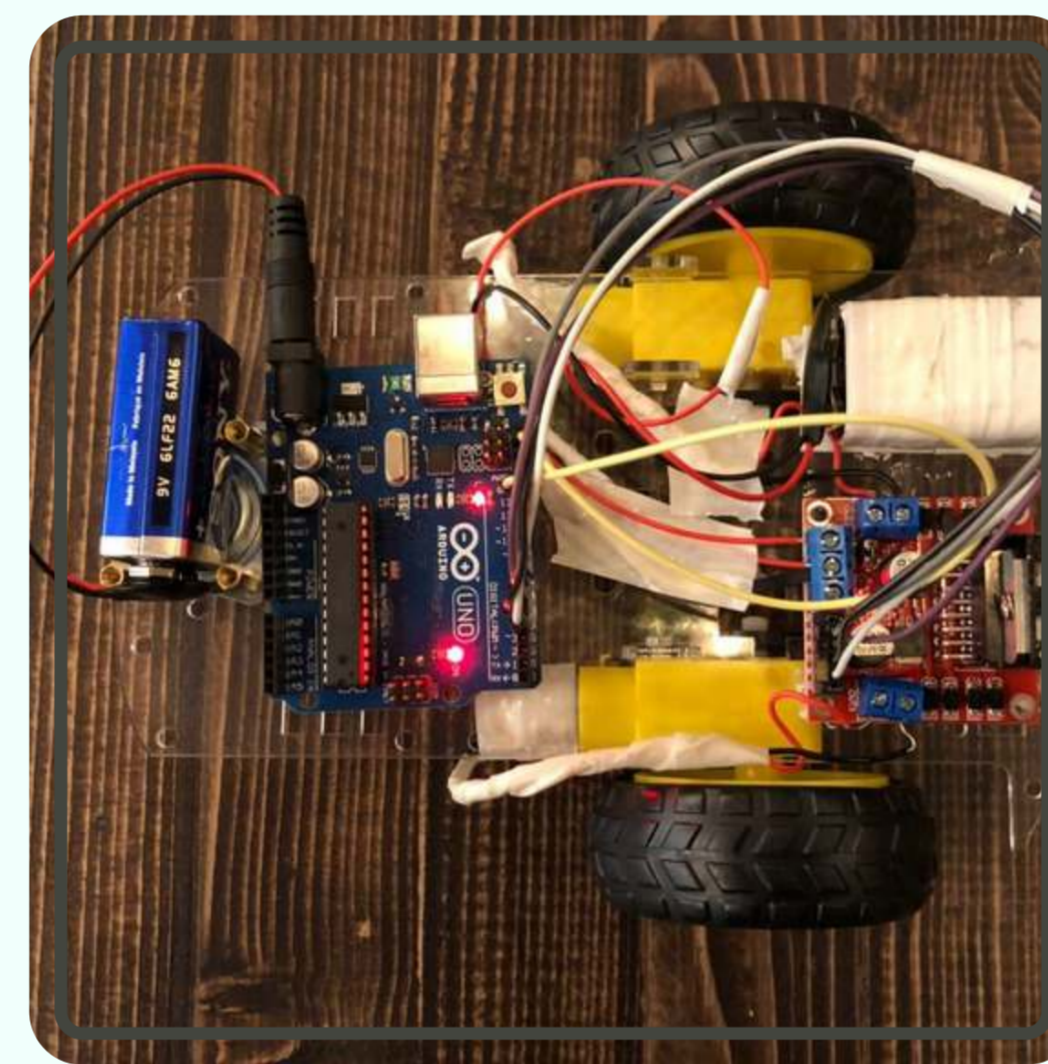
This project aims to design a solar tracking and positioning robot to act as a better alternative to conventional dual axis tracking systems. The control algorithm of this robot has the base of open-loop dual-axis tracking systems with an addition of a GPS in order to extract some input data such as date and time. The proposed design will have the ability analyze the solar tracking algorithm, move between panels and position multiple them accordingly, which in return will enhance the overall efficiency and output of solar panels.

UNIVERSITY OF SHARIAH
COLLEGE OF ENGINEERING
DEPARTMENT OF
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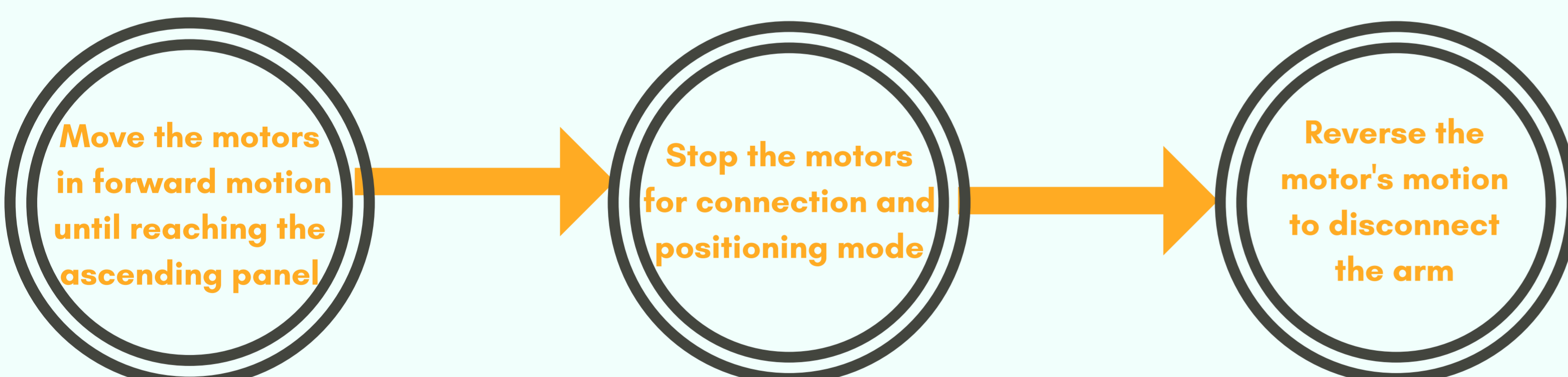
FLOWCHART OF THE SOLAR TRACKING



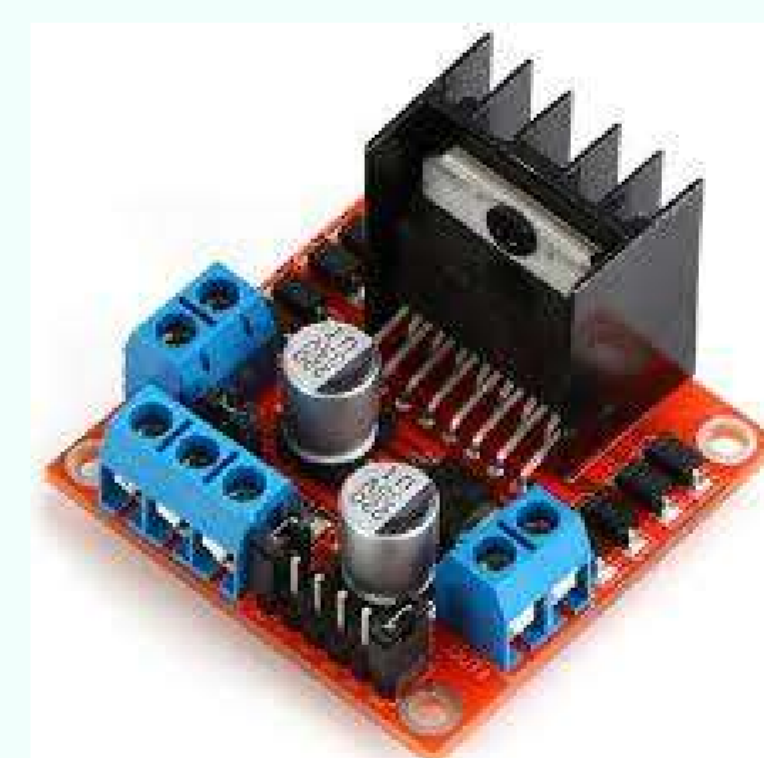
SYSTEM IMPLEMENTATION



FLOWCHART OF THE ROBOT'S MOTION



COMPONENTS



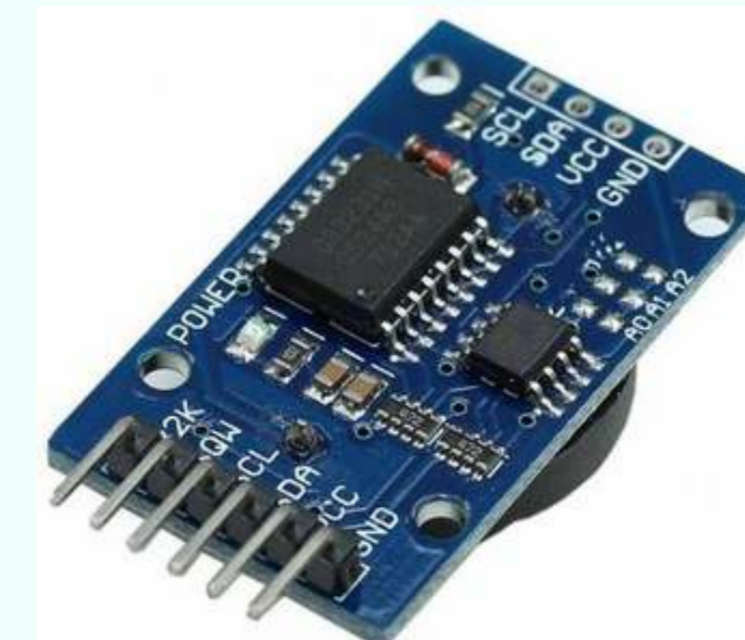
L298n Motor Driver



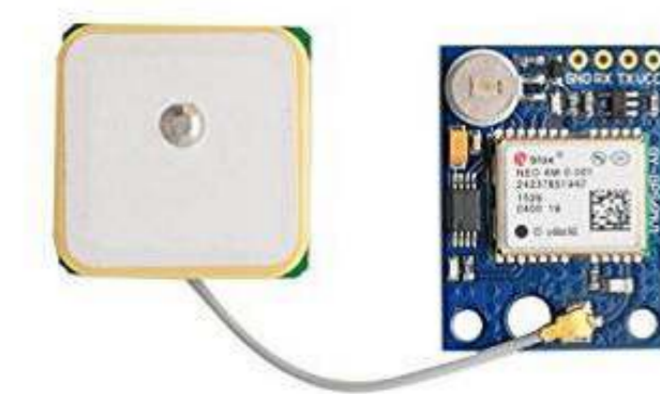
Arduino Uno



Servo Motor



DS3231 RTC



Ublox NEO-6M GPS Module



Wheels and Dc Motors

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PROJECT'S GROUP