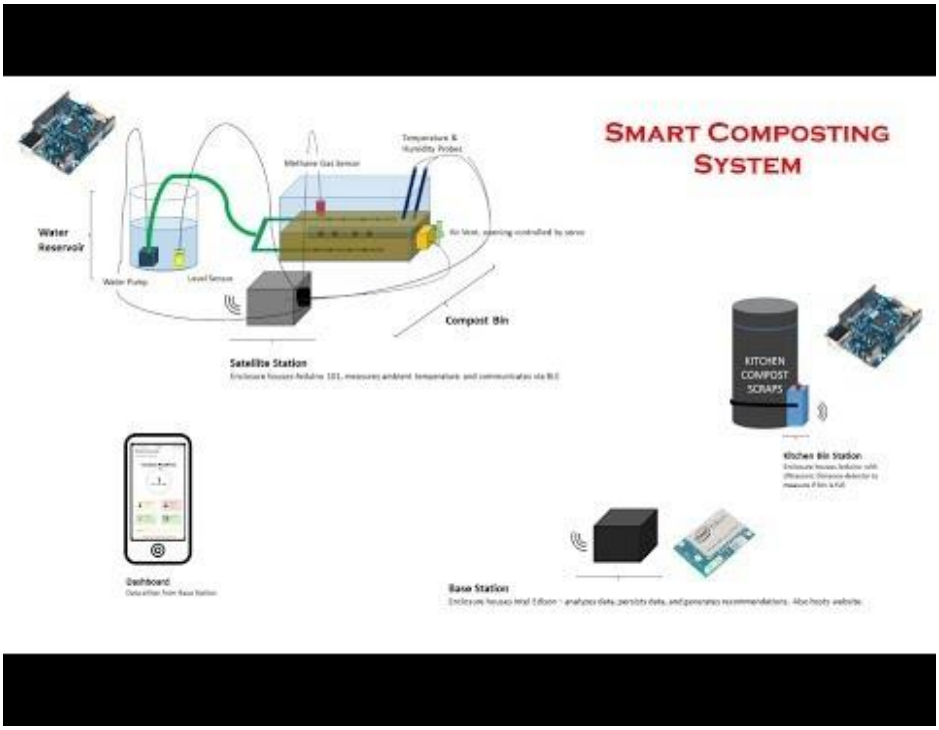
2018 Projects and Design projects (IRACC)

Vertical Pro Farm is an initiative taken towards a clean and fresh future that will allow the coming generations to enjoy the purity of different farm products.

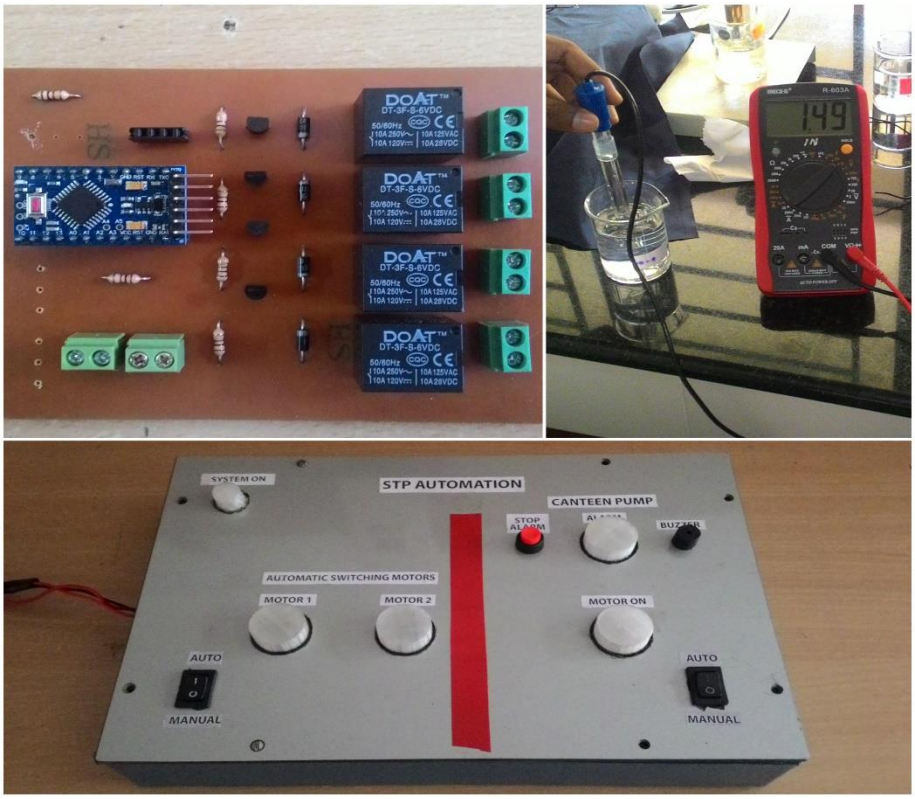
Organic waste management

In order to manage the waste in the origin itself, the prototype of an organic waste dispenser is proposed which can convert the waste into a slurry form which can be either directly flushed out through the drainage pipe or can be used as organic composts for cultivation as value added product.



Automatic Sewage Treatment Plant

The automation of the sewage treatment plant in the camps has been carried out as four sections, which includes Level indication and automatic motor switching, Alternative switching between two motors, Control panel installation and Ph measurement and control system. The proposed system has been successfully applied to a wastewater treatment plant and has realized optimal control, operation and management. Production cost and quality of wastewater have been decreased and improved greatly.



Automated surveillance drone

The quad copter is controlled by a flight controller which gives control signals to the four ESC (Electronic Speed Control) modules of the drone which controls the speed of the brushless motors of the drone, while the flight controller receives control signals from a master controller which runs the autonomous flight logic and gives appropriate signals to the flight controller.

Rubix cube solving robot

A demonstrator in shape of an autonomous Rubik’s cube solver will be built. A scrambled cube will be put into the demonstrator controlled by an Arduino.The demonstrator will use a solving algorithms to solve the cube.