

ABSTRACT

The development of information and communication technology lately has developed in all fields, one of which is an information system in the form of a website which is widely used as a Ground Control Station to monitor all existing movements. In the field of fisheries, especially the provision of fish feed using handfeeding techniques and developing into an Automatic Fish Feeder design is one of the most effective innovations in scheduling fish feeding. With the existing scheduling system, it is necessary to have a monitoring system to display all existing data into the GCS display that has been built.

This final project is designed to make a dashboard-based GCS system to monitor the condition of the Autonomous Boat operating in fish farming with the aim of providing structured fish feed. With the monitoring system on the Autonomous Boat, it can make it easier for us to see the condition of the ship's movement if something happens to the ship at any time and for the fish feeding system we can monitor the feeding in real-time.

The results of making the dashboard can make it easier to monitor the state of the Autonomous Boat, all features can be seen such as displaying feed data, which displays how many grams come out each time, servo data, namely the status of opening the servo cover on a large fish feed container, navigation data, which is displaying GPS navigation points. and displays the IP address of the ESP32-CAM camera in the form of video streaming. The results of performance testing by displaying data from the ship, were successfully displayed into the dashboard in real-time.

Keywords: Information System, Monitoring, Dashboard, Ground Control Station.