Contribution ID: **579**   Type: **Poster**

Quadcopter flight controlled by microcontroller

Monday 21 May 2018 18:30 (15 minutes)

In this project, quadcopter flight controller using microcontroller Arduino UNO R3 was built. The microcontroller Arduino UNO R3 is used because it can receive both digital and analog signals, there are several receive and output ports which can send PWM signal which is very useful for control brushless motors using PID algorithm that can govern such high rotational speed. The proposed quadcopter design utilize MEMS (Micro-Electro Mechanical Systems) sensor for measuring physical parameters such as 3-axis acceleration, gyro rate in order for feedback control. As a result, using the microcontroller with proposed algorithm one can control the quadcopter using RF remote control.

Author: HOMCHAN, Meechai

Co-author: Dr KAEWKONGKA, Tonphong

Presenter: HOMCHAN, Meechai

Session Classification: A08: Instrument (Poster)

Track Classification: Instrumentation, Metrology and Standards