

# **Embedded Build and Automation**



# **PFE Topic 5**

Development of a test bench

## Description

Testing automation for embedded software projects has turned to be of great importance for quality assurance in the software development.

The purpose of this project is to design and develop a Hardware in the loop setup based on a desktop application and measurement equipment. The application connects to multiple interfaces such as I/Os, serial devices, Bluetooth, etc. and serves for the automatic validation of embedded products.

#### Skills

Embedded-C, Microcontroller, STM32, Wireless communications, Hardware interfaces, Security

## **PFE Topic 6**

No/Low code configuration

## Description

Node-red is an innovative tool for wiring hardware devices, software API's and online services.

The purpose of this project is to create an application using Node-red and embedded-C to disassociate the application logic from the low-level firmware and make it easy for the end user with no programming skills to configure an IoT device.

#### **Skills**

Embedded-C, Artificial Intelligence, Deep Learning, Microcontroller, STM32





