

Increasing the Embedded Programming Competency of Robotics Community Teachers at the DIY Technology and Education Center for IoT Applications

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ABSTRACT

The Robotics Community is a forum or community for gathering, sharing the latest information and insights related to robotics expertise. The PPM activities that have been carried out aim to improve skills and insight in both embedded system hardware and programming. The material is focused with the aim of getting to know and utilize the ESP32 IoT device in depth, starting from tool introduction, configuration, IDE installation, sensor-actuator introduction, communication between ESP32 devices, connection with the IoT Platform, communication protocol selection to device security. PPM activities were successfully carried out in the presence of 24 robotics community teachers located at the DIY Tekkomdik Hall. The activity will last for 2 days, namely on 11-12 July 2023. Robotics community teachers are enthusiastic about utilizing ESP32 and are expected to be able to bring these new insights to their respective schools.

Kata Kunci: *Training, Embedded Programming, Robotics Community, Internet of Things*