Contribution ID: **230** Contribution code: **S1 Physics Innovation** Type: **Poster Presentation**

Thai Voice Command System for Mobile Robot

In this research the Turtlebot2 robot is equipped with the ReSpeaker Mic Array sound sensor infacing through the ROS (Robot Operating System) and using Dialogflow. It works from the Google Cloud Platform and helps convert voice messages into variables for data processing with TurtleBot2. The Kinect is replaced by Lidar to improve the quality of map creation and automatic navigation. The experiment simulates coordinates in various locations and testing automatic navigation with Thai voice commands. From the results of the experiment, the robot can move to the specified coordinates with Thai voice commands. The average error is 3.7 cm. And percentage error is 10.5 when compared with the size of the robot.

Primary author: MANGTHAS, Wisit

Presenter: MANGTHAS, Wisit

Session Classification: Poster: S1 Physics innovation

Track Classification: Physics Innovation