ABSTRACT

Various innovation have been made for human needs in transportation, so bus user

can feel peaceful and comfortable when using transportation. This smart bus stops

give information bus arrival that can adapt any situation. In this research will

explain smart bus stops system using RFID, mini PC and GPS.

In this smart bus stops will given RFID reader which can read RFID tag that was

patch every bus. This RFID also connected to Ethernet cable with mini pc Raspberry

Pi 3,B type wich will read input from RFID reader. After read input, mini PC will

read the identity from that bus which arrived. Mini PC will estimate when bus arrive

in next bus stops. This estimation make important information that will send to all bus

stops. Because raspberry Pi 3, B type, has been supported by Wi-Fi module that make

mini PC possible to connect internet easly. Every mini PC connected to display

monitor use HDMI cable.

From the research RFID can give a accurate data and give output form bus arrival

estimation accurately. So that smart bus stops can give update information about bus

arrival estimation. Therefore will increase comfort candidate of bus passanger

Key words: smart bus stops, RFID, Raspberry Pi