

AUTOMATIC IMAGE CAPTURING SYSTEM USING AIR-TRANSPORTATION

by

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APPROVAL AND DECLARATION SHEET

This project report titled Automatic Image Capturing System Using Air-Transportation was prepared and submitted by Tsai Yew San (Matrix Number: 031080504) and has been found satisfactory in terms of scope, quality and presentation as partial fulfillment of the requirement for the Bachelor of Engineering (Communication Engineering) in Universiti Malaysia Perlis.

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ABSTRAK

Tajuk projek ini ialah Sistem Pengambilan Imej Secara Automatik Dengan Menggunakan Pengangkutan Udara. Objektif projek ini adalah merekabentuk sistem komunikasi RF yang dapat menghubungkan camera dengan komputer secara 'wireless' melalui microcontroller. Data imej yang ditangkap oleh kamera dihantar balik ke komputer melalui sistem RF. Kamera dihubungkan ke microcontroller dan data dihantar ke microcontroller dari kamera. Analog Digital Converter digunakan untuk membolehkan microcontroller membaca data tersebut kerana data kamera adalah dalam bentuk analog. Sistem perhubungan RF membolehkan perhubungan komputer dengan microcontroller. Data dihantar ke komputer dan dipaparkan di Visual Basic dalam bentuk kod ASCII dan juga bentuk binari. Disebabkan pembatasan belanjawan, pengangkutan udara tidak digunakan tetapi data yang berjaya dihantar menggunakan RF signal dianggap sebagai simulasi tersebut. Sistem Pengenalan Plat Nombor Kereta diharapkan dapat dilengkapkan ke dalam projek ini pada masa depan

ABSTRACT

The title of the project is Automatic Image Capturing System Using Air-Transportation. The objective of this project is to design RF communication system that will be able to link a camera with a computer wireless via microcontroller. The data of the image that the camera capture was send back to a PC ground station via the RF system. A camera was connected to the microcontroller and data was send to the microcontroller from the camera. Analog Digital Converter was used to enable the microcontroller to read the data since the camera data will be analog. RF link was use to enable communication between the computer and the microcontroller. Data was send to the computer and displayed in ASCII code form and binary form using Visual Basic using the RF link. Due to the project budget limitation, the air transportation is not used but instead the data that was transferred using RF system are considered as the successful simulation. The Number Plate Recognition project hopefully can be implemented into this project in the near future