



University College Sedaya International

UCSI
LIBRARY



SCHOOL OF ENGINEERING

DETECTION OF LIGHT AND SOUND BY ANIMAL SPECIES

FINAL REPORT

STUDENT'S NAME:

KAW FEI JUN

STUDENT'S ID:

99107140

MAJOR:

ELECTRICAL & ELECTRONIC ENGINEERING

FIRST SUPERVISOR'S NAME:

DR. KHEDR M. M. ABOHASSAN

SECOND SUPERVISOR'S NAME: MR. LOW BOON TAT

PROJECT'S COORDINATOR:

DR. KHEDR M. M. ABOHASSAN

JANUARY – AUGUST 2005

Abstract:

This project is about the study of the physics involved in the production of sound and the detection of light and sound by animal species. Technical information about the ability of animals to produce sound and their ability to recognize the world through sight and hearing will be collected by means of background readings. Practically, the project is divided into two parts, the response of animals towards light and the detection of sound by animal species. In the light section, a light transmitter is used to emit different frequencies of light towards animals. The changes of their heartbeat can be considered as the response of the animals. The spectrogram of the heartbeat would be interfaced and displayed in the computer. In the other hand, for the sound section, a sound detector is used to capture the sound that is produced by animals. Similarly, the waveforms of the sound would also be interfaced and displayed in the computer. From these waveforms, the sensory ability and the behaviour of various animal species would be analyzed theoretically.