

DAFTAR ISI

| | |
|-------------------------------------|----|
| LEMBAR PENGESAHAN..... | 2 |
| TUGAS AKHIR | 2 |
| ABSTRAK | 4 |
| ABSTRACT | 5 |
| KATA PENGANTAR | 6 |
| UCAPAN TERIMA KASIH..... | 7 |
| DAFTAR ISI | 8 |
| DAFTAR GAMBAR | 11 |
| DAFTAR TABEL | 12 |
| BAB 1 | 13 |
| PENDAHULUAN | 13 |
| 1.1 Latar Belakang Masalah | 13 |
| 1.2 Rumusan Masalah | 14 |
| 1.3 Tujuan Penelitian | 14 |
| 1.4 Batasan Masalah | 15 |
| 1.5 Metode Penelitian | 15 |
| 1.6. Jadwal Pelaksanaan..... | 16 |
| BAB 2 | 17 |
| DASAR TEORI..... | 17 |
| 2.1 Hama Burung..... | 17 |
| 2.2 NVIDIA Jetson Nano..... | 18 |
| 2.3 Arduino Uno..... | 19 |
| 2.4 Buzzer | 20 |
| 2.5 OpenCV..... | 20 |
| 2.6 Servo | 21 |

| | |
|---|----|
| 2.7 Tali Nilon | 21 |
| 2.8 Kamera | 22 |
| BAB 3 | 24 |
| METODE PENELITIAN..... | 24 |
| 3.1 Desain Sistem | 24 |
| 3.2 Desain Perangkat Keras | 25 |
| 3.2.1 NVIDIA Jetson Nano..... | 26 |
| 3.2.2 Kamera Modul..... | 27 |
| 3.2.3 Arduino Uno..... | 27 |
| 3.3 Desain Perangkat Lunak | 29 |
| 3.3.1 Kamera Modul..... | 29 |
| 3.3.2 Buzzer pada Arduino UNO | 30 |
| 3.3.3 Servo pada Arduino UNO | 30 |
| 3.3.4 Jetson Nano ke Arduino UNO..... | 30 |
| 3.3.5 Frame Per Second (FPS) | 31 |
| BAB 4 | 33 |
| HASIL UJI DAN ANALISIS..... | 33 |
| 4.1 Implementasi Alat | 33 |
| 4.2 Pengujian Alat..... | 33 |
| 4.2.1 Pengujian Kamera..... | 34 |
| 4.2.2 Pengujian Servo..... | 36 |
| 4.3 Performa Alat | 37 |
| 4.3.1 Brightness (tingkat kecerahan) | 37 |
| 4.3.2. FPS (Frame per second) | 38 |
| 4.3.3 RAM | 39 |
| BAB 5 | 41 |

| | |
|----------------------------|----|
| KESIMPULAN DAN SARAN | 41 |
| 5.1 Kesimpulan..... | 41 |
| 5.2 Saran..... | 41 |
| DAFTAR PUSTAKA | 42 |
| LAMPIRAN | 43 |