

## ABSTRACT

**Thesis Title** : DESIGN OF A MAGNETIC SELENOID DOOR LOCK SECURITY SYSTEM IN ROOMS WITH SPEECH RECOGNITION USING THE ANDROID-BASED NODE MCU ESP8266

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Cats are the most loved pets in all circles. However, with many people's activities nowadays, it makes the activity of taking care of pets even more difficult even though the simplest thing is giving food every day, thus causing the pet owner to give as much food as possible regardless of the portion and time of feeding. The research was conducted with the aim of facilitating and assisting pet owners in providing nutritional intake for their pets, especially for cats who are in the house all the time. This tool works by using Arduino Mega 2560 as a controller and tool system control, the ESP32 CAM module as a liaison for smartphone devices that provide telegrams, RTC as a predetermined cat feeding timer and the LCD will display the time and date in real time.

**Keywords:** : *Wemos D1, Esp32 CAM, Sensor Pir, Speech recognition*



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**Judul Skripsi : RANCANG BANGUN SISTEM KEAMANAN  
MAGNETIC SELENOID DOOR LOCK PADA  
KAMAR KOS DENGAN SPEECH RECOGNITION  
MENGUNAKAN NODE MCU ESP8266 BERBASIS  
ANDROID**

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Kunci pintu adalah salah satu kebutuhan terpenting untuk sistem keamanan saat ini dan memberikan privasi untuk ruangan dengan tujuan tertentu. Teknologi door lock yang saat ini dikembangkan menggunakan perangkat Wemos D1 untuk memanfaatkan smartphone Android, sehingga dapat membuka atau mengunci pintu dari jarak dekat maupun jauh. Speech Recognition adalah teknik dan pengembangan sistem yang memungkinkan komputer menerima input berupa kata-kata yang diucapkan. Adapun Speech Recognition, ini banyak digunakan untuk mengontrol perangkat seluler.

**Kata Kunci : Wemos D1, Esp32 CAM, Sensor Pir, Speech recognition.**