

## ABSTRACT

**Rancang Bangun Alat Pengukur Tinggi Badan Berbasis Mikrokontroller Dengan Output Suara,** Yoni Ahmad Rifqi, NIM E32121185, Tahun 2015, Teknologi Informasi, Politeknik Negeri Jember, Denny Wijanarko, S.T, M.T (Pembimbing I), dan Elly Antika, ST, M.Kom (Pembimbing II).

*In general, the height measuring instrument is designed for people who have normal physical condition, especially in the ability to see. People who have limited vision, will have difficulty in using a measuring instrument existing height. Related to the problem, the report describes the final project design human height gauges with digital display and sound output Atmega AVR microcontroller based hardware 8535. This tool consists of a ping sensor SRF01, 8535, Module mp3, LCD 16x2, and Active Speaker. To be able to design a system, it was first performed within the process of converting into analog data using ping sensor SRF04. The analog data is then converted into digital data using the internal ADC of microcontroller Atmega 8535. Then processed by the microcontroller ATmega8535 and through a 16x2 LCD display to output sound to the previously active speaker voice recordings are stored in the memory module mp3 in mp3 format.*

*Keywords: height gauges, AVR Microcontroller Atmega8535, LM35, 16x2 LCD, speakers, mp3 module, ADC.*