

**THE PC BASED SECURITY SYSTEM OPTIMIZED BY
AUTOVIDEO CAPTURING AND AUTOPHONE DIALLING**
(SISTEM PENGAMAN BERBASIS PC TEROPTIMASI
AUTO VIDEO CAPTURING DAN AUTO PHONE DIALLING)

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ABSTRACT

This research is purposed to develop a security system based on PC optimized by autovideo capturing and autophone dialling. The result of this research are can be used to aid teaching learning process at D3 Electrical Engineering Study Program of Engineering Faculty, State University of Yogyakarta.

This research is closed by research and design method. The steps of this research are system requirement analysis, modules design, implementation (coding) and testing. The prototype of this security system consists of hardware component: PC, handphone, camera (webcam and CCTV), TVTuner, driver sensor ke LPT1 and any sensors. Software components: Software development with Borland Delphi 6 with some added component. Delphi Component for controlling cameras use TVideoGrabber and component for accessing serial port use TComport. Building data communication programming (with Delphi) between PC and handphone based on AT Command. The handphones that used in this research are nokia series with wireless modem support (nokia 3220).

The result of this research is a prototype of security system based on PC that can dial two telephones number sequencially and can capture (record) the real time event via installed camera in the PC otomatically when one of sensors are activated. The file result of capturing can be stored in AVI or MPEG format. The size of MPG files littler than AVI file. Sensor Driver to LPT1 that have been developed have performance can control 4 sensors (2 sensors with sound signal output, and 2 sensors with digital output). The interfacing between PC and sensor, cameras, and handphone can be used to aid Interfacing Engineering class.

Keywords: *interfacing, video capturing, AT command, delphi programming*