

**DEVELOPMENT OF DATA ACQUISITION SYSTEM TO MONITOR
THE TEMPERATURE PROFILE**



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ABSTRACT

“The Development of Data Acquisition System to Monitor the Temperature Profile” is a project that combines the data acquisition and control techniques in order to develop a system that able to measure and control the temperature level inside a closed container such as a computer case. The system is implemented through the integration of hardware and software parts. The hardware section covers the process of building a temperature sensor and an actuator. They are connected to the computer using the parallel port. Through the computer and C++ programming language, a GUI application program is created to present the temperature reading numerically and graphically, and at the same time give user the ability to control the computer case’s fan to maintain the temperature level at specific point. This system is created to overcome the stability issue of the computer due to high operating temperature. It improves the cooling mechanism inside the computer case. With some modification, it can be extended to be utilized for other purposes.