## **ABSTRACT**

MH5 network a hotspot network provider organization in a area Cipeundeuy. Internet providers supported by the wireless device and network settings Wireless Local Area Network (WLAN) for the needs of internet connection by network management personnel (MH5 Network). The hotspot network distributed into four points hotspot. As for the various technical defects arise as a result of natural factors, human factors and factor appliance. It is necessary for the application of expert system.

In This study will be Analysis and Design application of expert systems, ranging from technical damage analysis of network, network topology, and the need for expert systems. Application design expert system is applied in MH5 network based on the need to shorten the time in diagnosing a technical problem on the network hotspot MH5 area network.

The goal of this research apply expert systems to diagnose and provide solutions to every problem of tissue damage in MH5 hotspot network.

**Keywords:** MH5, network, LAN, WLAN, hotspot, internet.