## **Abstract**

Telecommunications World in this time grown very quickly. Internet user are the key of this technological growth of telecommunications. In order to technological growth go forward at full speed, so internet must can be used by whenever and anywhere.

Hotspot as one of provider of medium internet which is trend in this time represent the best medium. With the existence of our hotspot we can access the internet by mobile. But this medium earn threatened by irresponsible party's. Hotspot Security is vital importance to take care of the attack which they do. When us using hotspot we might possibly doing transaction by using credit card, at least we can take care of sending of data from our laptop or computer until the server hotspot safely.

Because above problem hence system of security hotspot of vital importance. Correct Security scheme to avoid the above attack have to be very concern. One of all important parameter in the scheme is to choose the correct encryption algorithm. This Final Project have analyze the encryption algorithm to be used at the hotspot encryption. Encryption algorithm that used in this analysis are AES 256 bit and WPA. At this final project, AES 256 bit have the higher level security than WPA but lower performance than WPA.