

## ABSTRACT

*Every year the number and use of swimming pools as a tourist attraction or privately owned is increasing. The increasing number of swimming pools has triggered other problems, namely around swimming pools maintenance and cleanliness of the swimming pool itself. The more advance the development of the era, the more modern things in this world has increase too. For example is, many thing can be set automatically, including enviromental cleanlines system.*

*For this reason, the main focus of this research is to create a system where the main objective is to be able to monitor and detect the cleanliness of the swimming pool in the form of checking ammonia levels in the water of a swimming pool.*

*By using the help of the internet, especially the internet of things and artificial intelligence, it is hoped that this pool cleaning system will work automatically by connecting to a smartphone through the help of the blynk application, of course with the data that has been obtained. The data displayed will be in the form of how much ammonia is in the water in ppm which has previously been measured with the MQ 135 sensor and processed by NodeMCU 8266.*

**Kata Kunci:** *ammonia, swimming pool, MQ 135 sensor, NodeMCU 8266, internet of things, smartphone, blynk.*