

ABSTRACT

**DESIGN AND DEVELOPMENT OF A PROTOTYPE WARNING
SYSTEM TO MITIGATE TOURIST BATHING AREA HAZARDS
AND FLOODING IN CURUG DHUWUR RIVER BUMISARI
VILLAGE PURBALINGGA BASED ON IOT**

By

Fajar Setiawan

21102183

Indonesia is a country with a vast number of tourist destinations, one of which is waterfall tourism. However, not many waterfall tourist attractions prioritize visitor safety. Curug Dhuwur, as one of these waterfall destinations, is not only enjoyed for its natural beauty but is also frequently used for fishing. The main problem at Curug Dhuwur is that visitors face difficulties in seeking help due to the relatively remote location and the water conditions that frequently change due to geographical factors. As a result, the tourism management cannot predict water conditions or monitor visitors effectively. The Internet of Things can provide a solution to these challenges faced by both tourists and tourism managers. The system design produces two module boxes: a system module and a laser module. The system design achieves an accuracy level of 98.33%. The user experience satisfaction scale for the designed system falls within the high acceptability range.

Keywords: Internet of things, Laser receiver