

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama" Belagavi – 590 010



PROJECT REPORT ON
IOT AND ARDUINO BASED SOLDIERS HEALTH
MONITORING AND POSITION TRACKING SYSTEM

Submitted in partial fulfillment of the requirements for the award of degree

BACHELOR OF ENGINEERING
IN
ELECTRONICS & COMMUNICATION ENGINEERING

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

MOODBIDRI – 574 225.

2018-2019

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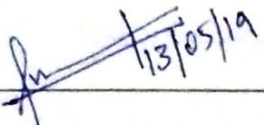
DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

CERTIFICATE

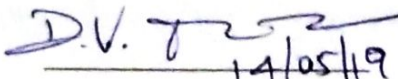
Certified that the project work entitled "IOT AND ARDUINO BASED SOLDIERS HEALTH MONITORING AND POSITION TRACKING SYSTEM" is a bona fide work carried out by

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in partial fulfillment for the award of BACHELOR OF ENGINEERING in ELECTRONICS & COMMUNICATION ENGINEERING of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2018-2019. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.


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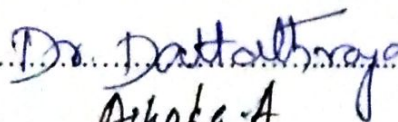
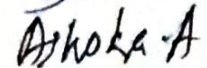

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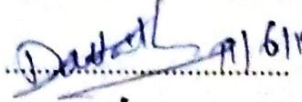

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Signature with date

ABSTRACT

In current world scenario the security of a nation is the uttermost important factor and hence enemy warfare plays an important role. The security of any nation depends on the military, army air-force and navy of the country and the backbone of all these forces are our soldiers. Without the soldier it would be nearly impossible to protect a nation. But there are many concerns revolving around the security of these soldiers, especially the army soldiers. Even today when the world is at its prime for technology development, the army is still using rudimentary techniques especially when navigation technology is taken into consideration. When the soldier enters into the war zone, it is essential for the base station to determine the exact location and the health status of the soldier and hence more emphasis should be given to navigation and health monitoring technology for the soldiers in the war torn zone.

In this project the exact location and the health status parameters of the soldier can be sent to the base station in real time so that the appropriate actions can be taken in case of crisis. This technology helps to minimize the rescue, time and search operation effort of army rescue control unit. This system uses GPS module and wireless body area sensor network to record all parameters in real time and send it to the base station. The different types of sensors used in this system are the humidity sensor, temperature sensor and pulse sensor which help in deciding the health status of that particular army official. This is a wearable technology which is the most important factor of this project.