



भारतीय प्रौद्योगिकी संस्थान (भारतीय खनि विद्यापीठ), धनबाद

धनबाद, झारखण्ड भारत, पिन - 826004

INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

DHANBAD, JHARKHAND, INDIA PIN - 826004

(An Autonomous Institute under Ministry of HRD, Govt. of India)

Date: 06.05.2019

TO WHOMSOEVER IT MAY CONERN

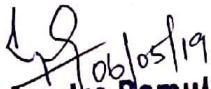
This is to certify that Mr. R. ASHWEEN has done his internship in the area of "Wireless Sensor Networks", in Indian Institute of Technology (ISM) Dhanbad from 15.04.2019 to 06.05.2019.

He has worked on a project titled "Energy efficient embedded routing protocol in WSN using Oppositional Grey wolf optimization algorithm". This project was aimed to result in a journal paper. As part of the project, he came up with a problem statement, and also the solution to overcome that problem.

During the internship he demonstrated good skills with a self-motivated attitude to learn new concepts. His involvement, hardworking and dedication lead to complete the project successfully on time.

We wish him all the best for his future endeavors.

Best Wishes,



Dr Rajendra Pamula

Assistant Professor

Department of Computer Science & Engineering
Indian Institute of Technology
(Indian School of Mines)
Dhanbad - 826004 (Jharkhand)