

## CERTIFICATE

This is to certify that the thesis / dissertation entitled “**Steganography and Steganalysis Techniques Based on Fall off Boundary Problem, Unused Block Problem and Multi-directional Edges**” being submitted by Reshma Sujal Sonar in partial fulfilment for the award of Ph.D. in the **Faculty of Engineering** and in the discipline of **Computer Science and Engineering** to **Koneru Lakshamaiah Education Foundation**, is a record of bonafide work carried out by her under my guidance and supervision.

The results embodied in this thesis have not been submitted to any other University or Institute for the award of any degree or diploma.

**Place:** Vaddeswaram

**Date:**

Signature of the Supervisor

**Dr. Gandharba Swain**

Professor

Department of Computer Science & Engineering