A Project Report

On

**ANALYSIS OF SOFTWARE
DEFECT PREDICTION
MODELS FOR DEFECT
CATEGORISTAION**

Submitted to

Amity University Uttar Pradesh

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

B.Tech.(CSE)+MBA

MRINAL JHAMB

under the guidance of

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DEPARTMENT OF COMPUTER SCIENCE

AMITY SCHOOL OF ENGINEERING AND TECHNOLOGY

AMITY UNIVERSITY UTTAR PRADESH

NOIDA (U.P.)

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DECLARATION

I, Mrinal Jhamb, student of B.Tech(CSE)+MBA hereby declare that the project titled "Analysis of Software Defect Prediction Models for Defect Categorisation" which is submitted by me to Department of Computer Science, Amity School of Engineering and Technology, Amity University Uttar Pradesh, Noida, in partial fulfillment of requirement for the award of the degree of B.Tech.(CSE)+MBA , has not been previously formed the basis for the award of any degree, diploma or other similar title or recognition.

-Mrinal Jhamb

-A2305214017

CERTIFICATE

On the basis of declaration submitted by Mrinal Jhamb, student(s) of B.Tech.(CSE)+MBA, I hereby certify that the project titled "Analysis of Software Defect Prediction Models for Defect Categorisation" which is submitted to Department of Computer Science, Amity School of Engineering and Technology, Amity University Uttar Pradesh, Noida, in partial fulfillment of the requirement for the award of the degree of B.Tech.(CSE)+MBA, is an original contribution with existing knowledge and faithful record of work carried out by him/them under my guidance and supervision.

To the best of my knowledge this work has not been submitted in part or full for any Degree or Diploma to this University or elsewhere.

Date: Ms. Misha Kakkar

Department of Computer Science and Technology

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My major project report has been successful, thanks to all the support staff of my friends and colleagues with gratitude. I wish to acknowledge all of them.

Mrinal Jhamb

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ABSTRACT

In this project attempt will be made to find out best performing techniques (classification) for software defect prediction. This project goes further by looking beyond the numbers, by looking at the specific defects detected or not detected by the specific classifiers. Even though the predictive power of almost all models is similar but there is a difference between defects detected and not detected by each of them. This project further investigates whether different classifiers are equally consistent in their predictive performances. Results from here show that the way using ensembles and considering flipping is the future of building high performing models.

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