Aditya College of Engineering & Technology

Aditya Nagar, ADB Road, Surampalem - 533437

DEPARTMENT OF INFORMATION TECHNOLOGY

B. Tech 4/4, II-SEMESTER

II Semester 2021-22

SOFTWARE DEFECT ESTIMATION USING MACHINE LEARNING ALGORITHMS

ABSTRACT

Software Engineering is a comprehensive domain since it requires a tight communication between system stakeholders and delivering the system to be developed within a determinate time and a limited budget. Delivering the customer requirements include procuring high performance by minimizing the system. The project's resources and the effort of the software developers can be allocated more efficiently for system development and quality assurance activities. The main aim of this project is to evaluate the capability of machine learning algorithms in software defect estimation and find the best category while comparing seven machine learning algorithms within the context of NASA datasets obtained from public PROMISE repository. All in all, the results ensemble learners category consisting of SVM and Bagging in defect estimation is pretty

Course Outcomes (COs)

Course Outcomes

After completing this course, the student will be able to:

CO Number	CO Statement	Taxonomy
CO1	Demonstrate the technical knowledge to identify problems in the field of Information Technology and its allied areas.	Understand
CO2	Use literature to identify the objective, scope and the concept of the work.	Apply
CO3	Analyze and formulate technical projects with a comprehensive and systematic approach.	Analyse
CO4	Identify the modern tools to implement technical projects.	Evaluate
CO5	Design engineering solutions for solving complex engineering problems.	Create
CO6	Develop effective communication skills, professional behaviour and team work.	Understand

CO-PO/PSO MATRIX:

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
CO1	3	2	1	2					3	2	2	2	3	2	
CO2	2	1	2	2	1				3	2	2	2	3	3	1
CO3	1	1	3	3	1				3	2	2	2	3	2	1
CO4	3	1	3	2	3				3	2	2	2	2	3	2
CO5	3	2	3	3	3				3	2	3	2	2	1	1
CO6	1	1	1	2	1				2	3	2	2	1	1	2
Course	2.17	1.33	2.17	2.33	1.50				2.83	2.17	2.17	2.00	2.33	2.00	1.17

PO1	Engineering Knowledge	PO7	Environment & Sustainability
PO2	Problem Analysis	PO8	Ethics
PO3	Design / Development of Solutions	PO9	Individual & Team Work
PO4	Conduct Investigations of complex problems	PO10	Communication Skills
PO5	Modern Tool usage	PO11	Project Management & Finance
PO6	Engineer & Society	PO12	Life-long Learning