

ANALYSIS OF CLASSIFICATION PERFORMANCES OF DATASET ON VARIOUS DATA MINING TOOLS

A Project Report Submitted to

Jawaharlal Nehru Technological University Hyderabad

*In partial fulfillment of the requirements
for the award of the degree of*

**BACHELOR OF TECHNOLOGY
IN
COMPUTER SCIENCE AND ENGINEERING
BY**

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

(Affiliated to JNTUH Hyderabad, Approved by AICTE & Accredited by NAAC)

Ibrahimpattam - 501 510, Hyderabad

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BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY

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Certificate

This is to certify that the project work entitled
“AGRICULTURAL SOIL MONITORING” is a bonafide work done

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Vision of the Institution

To achieve the autonomous & university status and spread universal education by inculcating discipline, character and knowledge into the young minds and mould them into enlightened citizens.

Mission of the Institution

Our mission is to impart education, in a conducive ambience, as comprehensive as possible, with the support of all the modern technologies and make the students acquire the ability and passion to work wisely, creatively and effectively for the betterment of our society.

Vision of CSE department

Serving the high quality educational needs of local and rural students within the core areas of Computer Science and Engineering and Information Technology through a rigorous curriculum of theory, research and collaboration with other disciplines that is distinguished by its impact on academia, industry and society.

Mission of CSE department

The Mission of the department of Computer Science and Engineering is-

- To work closely with industry and research organizations to provide high quality computer education in both the theoretical and applications of Computer Science and Engineering.
- The department encourages original thinking, fosters research and development, evolve innovative applications of technology



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PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

The Computer Science and Engineering program provides students with an in depth education in the conceptual foundations of computer science and in complex hardware and software systems. It allows them to explore the connections between computer science and a variety of other disciplines in engineering and outside. Combined with a strong education in mathematics, science, and the liberal arts it prepares students to be leaders in computer science practice, applications to other disciplines and research.

Program Educational Objective 1: (PEO1)

The graduates of Computer Science and Engineering will have successful career in technology or managerial functions.

Program Educational Objective 2: (PEO2)

The graduates of the program will have solid technical and professional foundation to continue higher studies.

Program Educational Objective 3: (PEO3)

The graduates of the program will have skills to develop products, offer services and create new knowledge.

Program Educational Objective 4: (PEO4)

The graduates of the program will have fundamental awareness of Industry processes, tools and technologies.



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PROGRAM OUTCOMES (POs)

PO1:	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2:	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3:	Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4:	Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5:	Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO8:	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9:	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10:	Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11:	Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12:	Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



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PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1:	Foundation of mathematical concepts: To use mathematical methodologies to crack problem using suitable mathematical analysis, data structure and suitable algorithm.
PSO2:	Foundation of Computer System: The ability to interpret the fundamental concepts and methodology of computer systems. Students can understand the functionality of hardware and software aspects of computer systems.
PSO3:	Foundations of Software development: The ability to grasp the software development lifecycle and methodologies of software systems. Possess competent skills and knowledge of software design process. Familiarity and practical proficiency with a broad area of programming concepts and provide new ideas and innovations towards research.

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We place highest regards to our Parents, our Friends and Well wishers who helped a lot in making the report of this project.

DECLARATION

We hereby declare that this Project Report is titled “**AGRICULTURAL SOIL MONITORING**” is a genuine project work carried out by us, in **B.Tech (Computer Science and Engineering)** degree course of **Jawaharlal Nehru Technology University Hyderabad, Hyderabad** and has not been submitted to any other course or university for the award of my degree by me.

Signature of the Student

- 1.
- 2.
- 3.
- 4.

ABSTRACT

India's population reached beyond 1.2 billion and the population rate is increasing day-by-day; then after 25–30years there will be a serious problem for food, so the development of agriculture is necessary. The main objective of the project is to check the amount of the three major macronutrients, nitrogen (N), phosphorus (P), and potassium (K), in the soil thereby saving time, money, and power of the farmer. The N, P, and K amounts in the soil sample are determined by comparing the solution with color chart. This will describe the amount of N, P, and K as high, medium, and low. The traditional farm-land techniques require manual intervention. With this human intervention can be minimized.

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