DECLARATION

We hereby declare that this project work entitled **"Extension of Lexicon Algorithm for Sarcasm Detection"** in partial fulfilment of requirements for the award of degree of **Computer Science and Engineering** is a bonafide work carried out by us during the academic year 2021- 22.

We further declare that this project is a result of our effort and has not been submitted for the award of any degree by us to any institute.

BY

Rushali Patange – 18RA1A0537

CH. Divija – 18RA1A0510

Phanendhar Reddy – 18RA1A0531

ACKNOWLEDGEMENT

It gives us immense pleasure to acknowledge with gratitude, the help and supportextended throughout the project report from the following:

We will be very much grateful to almighty our **Parents** who have made us capable of carrying out our job.

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We are also very thankful to our **Management, Staff Members** and **all Our Friends** for their valuable suggestions and timely guidance without which we would not have been completed it.

BY
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Vision of the Institute

To emerge as a premier institute for high quality professional graduates who can contribute to economic and social developments of the Nation.

Mission of the Institute

Mission	Statement
IM_1	To have holistic approach in curriculum and pedagogy through industry interface to meet the needs of Global Competency.
IM_2	To develop students with knowledge, attitude, employability skills, entrepreneurship, research potential and professionally ethical citizens.
IM_3	To contribute to advancement of Engineering & Technology that would help to satisfy the societal needs.
IM_4	To preserve, promote cultural heritage, humanistic values and spiritual values thus helping in peace and harmony in the society.

Vision of the Department

To Provide Quality Education in Computer Science for the innovative professionals to work for the development of the nation.

Mission of the Department

Mission	Statement
DM_1	Laying the path for rich skills in Computer Science through the basic knowledge of mathematics and fundamentals of engineering
DM_2	Provide latest tools and technology to the students as a part of learning infrastructure
DM_3	Training the students towards employability and entrepreneurship to meet the societal needs.
DM_4	Grooming the students with professional and social ethics.

Program Educational Objectives (PEOs)

PEO's	Statement
PEO1	The graduates of Computer Science and Engineering will have successful career in technology.
PEO2	The graduates of the program will have solid technical and professional foundation to continue higher studies.
PEO3	The graduate of the program will have skills to develop products, offer services and innovation.
PEO4	The graduates of the program will have fundamental awareness of industry process, tools and technologies.

Program Outcomes

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 modelling to complex engineering activities with an understanding of the limitations.
PO6	**The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	**Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental context, and demonstrate the knowledge of, and need for sustainable development.

PO8	**Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9	**Individual and team network:** 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, 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 able to engage in independent and life-long learning in the broadest context of technological change.

Program Specific Outcome's:

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 Science:** 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	**Foundation 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.

Expected Program Outcomes:

PO1, PO2, PO5,

PO9, PO12.PSO1,

PSO2, PSO3.

Project Details	
Academic Year	2021-2022
Title of the Project	**Extension of Lexicon Algorithm for Sarcasm Detection**
Name of the Students and Hall Ticket No.	Rushali Patange (18RA1A0537) Ch. Divija (18RA1A0510) K. Phanendhar Reddy (18RA1A0531)
Name of the Guide	M. Naresh

ABSTRACT

Lexicon algorithm is used to determine the sentiment expressed by a textual content. This sentiment might be negative, neutral or positive. It is possible to be sarcastic using only positive or neutral sentiment textual contents. Hence, lexicon algorithm can be useful but yet insufficient for sarcasm detection. It is necessary to extend the lexicon algorithm in order to come out with systems that would be proven efficient for sarcasm detection on neutral and positive sentiment textual contents. In this paper, two sarcasm analysis systems both obtained from the extension of the lexicon algorithm have been proposed for that sake. The first system consists of the combination of a lexicon algorithm and a pure sarcasm analysis algorithm. The second system consists of the combination of a lexicon algorithm and a sentiment prediction algorithm.

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