

College of Engineering and Technology

Project Work/Internship – Student Hand Book

Project Batch ID
NW064

Degree/ program	B.Tech	Specialisation	Computer Science & Engineering	
Academic Year	2022-2023 (Even)	Semester	8	
Name of student	Register Number	Department	Mobile Number	Email ID
Aclitya Kumar	PA1911030010100	CSE	9979425368	ak8476@srmist.edu.in
Adarsh Mahapatra	PA1911030010071	CSE	9953734113	ak6663@srmist.edu.in
Course Code	18CSP109L/ 18CSP111L	Course Title	Project	

Mission Statement

Working Title of the Project:	SMS Spam Detection using Natural Language Processing and Ensemble Learning		
Project Site / Location			
Name and address of the company / organisation (Applicable for projects with industry or industry support)	SRM IST, Kattankulathur, Chengalpattu District-603203		
Supervision Team			
	Supervisor	Co-Supervisor	External Supervisor (If applicable)
Name	Dr. C. Eany		
Designation	Assistant Professor		
Department	NWC		
Campus	Kattankulathur		
Telephone	9487175375		
E-mail	faneyc@srmist.edu.in		

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Problem (or) Product Description:

SMS Spam Detection models have been built before but all of them have been made using one-two algorithms only and they have not been combined with any security feature before. This project aims to implement a custom spam detector model with Image Steganography tool.

Assumptions and Constraints

Project assumes knowledge of Steganography

Stakeholders

Dr C Eamy - Project Guide
Achitya Kumar - Developer
Adarsh Mahapatra - Developer

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Division of work and contributors

Time period		Activities or components of the project	Name/Register Number of the Individual Contributor	Names/Register Number of the Joint Contributors
From Date	To Date			
1 Jan	7 Jan	Entire Project Objective	Ashita Kumar	Adarsh Mahapatra
7 Jan	31 Jan	Performing Literature Survey	Ashita Kumar	Adarsh Mahapatra
1 Feb	3 Feb	Gathering dataset	Ashita Kumar	Adarsh Mahapatra
4 Feb	27 Feb	Developing models and developing custom model	Ashita Kumar	Adarsh Mahapatra
10 Feb	27 Feb	Preparing research paper	Ashita Kumar	Adarsh Mahapatra
21 Feb	1 Mar	Developing Image Steganography Tool	Ashita Kumar	Adarsh Mahapatra
1 Mar	10 Mar	Getting approval for paper from guide and submitting to conferences	Ashita Kumar	Adarsh Mahapatra
11 Mar	21 Mar	Optimizing models and rebuilding custom model again	Ashita Kumar	Adarsh Mahapatra
1 Apr	20 Apr	Preparing project report	Ashita Kumar	Adarsh Mahapatra
1 May	10 May	Making corrections in report and preparing documents for review	Ashita Kumar	Adarsh Mahapatra

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Summary record of major progress meetings with supervisors

Summary record of major progress meetings with supervisors		Working title of dissertation/research project:		
Meeting date & supervisors present	Progress since last meeting	Agreed programme of work and target dates	Other issues, e.g. facilities, supervision, training needs, etc.	Date of next meeting
5 th Jan	Proposed project with problem statement	Advised to change project scope.	None	18 th Feb
18 th Feb	Proposed new project after guidance of guide	Try to implement security features in the project	None	18 th Mar
18 th Mar	Project was accepted	To try to increase the size of the dataset		6 th May

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Meeting date & supervisors present	Progress since last meeting	Agreed programme of work and target dates	Other issues, e.g. facilities, supervision, training needs, etc.	Date of next meeting
6 th May	Optimised the modules of the project	Complete project report with approval from provided faculties	None	

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Worksheet / Data collection / Observation etc

The dataset from Kaggle was used for the project

Text data preprocessed and feature extraction done on it.

Used TF IDF vectorizer and built several models

Optimised models with varying parameters

Best performing models were KNN, NB and RF

Built custom ensemble model KNR using stacking classifier

Used 1 bit LSB technique for creating Image Stego tool

Successfully implemented custom model into tool and achieved goal of the project

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Journal Publication Details

The research paper was accepted in ICONIC - 23
: "International Conference on Networks,
Intelligence and Computing".

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ICONIC-2023 Accepted with Revisions for Paper ID 19

External

Inbox x



ICONIC-2023 <iconic2023@easychair.org>

to me

Apr 24, 2023, 10:56 AM



Dear Author(s),

Greetings of the day!!!

Review Report for the paper: 19

Title: SMS Spam Detection using NLP with Ensemble Learning Techniques

Author/s: Aditya Kumar, Adarsh Kumar Kar Mahapatra, Fancy C

We are glad to inform you that your paper is ACCEPTED with revisions for verbal presentation to the conference ICONIC-2023. Due to some technical issue, some of the authors were unable to register for the conference. So, we are sending acceptance to some more authors. The one who will register at the earliest will be given priority. As you know, only registered and presented papers will be published in Proceedings of Taylor & Francis. Additionally, we are pleased to inform you that our school is going to publish Abstract book with ISBN for all the accepted papers also. So, you are advised to register for the said conference on or before April 24, 2023 by 12:00 PM for the timely submission of the abstracts for the abstract book. The deadline of submission of revised paper is strict and those who fail to register by April 24, 2023 by 12:00 PM today will not be considered for publication in proceedings of Taylor & Francis and Abstract Book. All accepted papers must be presented during the conference in a specified schedule, which will be shared shortly. Please feel free to call me at 9417793917 Dr. Geet a, if you have any query. You can please register and send screenshot of payment at today to iconic@lpu.co.in

Registration Link: <https://conferences.lpu.in/iconic/RegistrationForm.aspx>

Please upload the final camera ready paper (Max 6 pages) to 'easychair' and also you need to submit the following documents to mail id iconic@lpu.co.in with the subject line: "ICONIC-2023 Final Camera ready submission for Paper: Paper ID, title" upto April 25, 2023.

Documents to be submitted:

1. The camera ready paper (Max 6 pages), modified strictly according to revisions suggested by experts and the paper format for the conference. Please attach both 'pdf' and the modifiable file.
2. The plagiarism report of the final camera-ready paper, checked by any authentic software like 'turnitin', 'urkund' etc. The maximum allowed similarity index excluding bibliography is 12% (Strictly).
3. Filled and signed copyright form.
4. Mention the presentation mode (Online/offline) in the subject line and mail body with the final submission.
5. Registration Proof (with normal registration fee upto 6 pages + 1500 INR for each extra page)

Publication Chair
ICONIC-2023
Lovely Professional University,
Phagwara, Punjab, India, 144411

Enclosure:
Copyright Form

SUBMISSION: 19
TITLE: SMS Spam Detection using NLP with Ensemble Learning Techniques