



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal - 500 043, Hyderabad, Telangana

DEPARTMENT OF INFORMATION TECHNOLOGY PORTFOLIO

Faculty Accomplishments: For The Month Of May 2025

S. No	Description	Values
1.	Faculty Industry Training	NIL
2.	Research Proposals / Schemes Submitted	1
3.	Publications	1
4.	Conferences / Seminars Attended	NIL
5.	MOOC Certifications	1
6.	Startups	NIL
7.	Patents (Published / Granted)	NIL

2. Research Proposals / Schemes Submitted

Temporary Registration No. : TPN / 132967



Project Proposal On

"Digital Heritage India Integrating Traditional Knowledge and Modern Technologies for Preservation and Access."

Submitted to

Division :SHRI

**Programme or Scheme : Science and Heritage Research Initiative
SHRI**

Submitted by

Project Investigator:

Dr. M Purushotham Reddy

INSTITUTE OF AERONAUTICAL ENGINEERING-Dundigal

Part 1: General Information :

1	Name of the Institute/University/Organization submitting the Project Proposal	INSTITUTE OF AERONAUTICAL ENGINEERING
2	State	Telangana
3	District and block	Hyderabad
4	Principal Investigator	Dr. M Purushotham Reddy / INSTITUTE OF AERONAUTICAL ENGINEERING
5	Category	General
6	Designation	Professor
7	Division of DST	SHRI
8	Programme Or Scheme	Science and Heritage Research Initiative SHRI
9	Broad Area	Indian Heritage for Digital Space ,
10	Type of Proposal	PI-based
11	Project Title	Digital Heritage India Integrating Traditional Knowledge and Modern Technologies for Preservation and Access.
12	Project Duration	3 Years
13	Proposed budget (In Rs.)	7666400.00
14	Proposal Submit Date	20/05/2025
15	Project Keywords	Traditional Knowledge Systems IKS, Cultural Heritage, Digital Archiving, Artificial Intelligence AI, Indigenous Knowledge
16	Project Summary :	<p>This project aims to digitally preserve and enhance access to India's rich cultural heritage by integrating traditional knowledge systems with cutting-edge digital technologies. Leveraging advanced tools such as 3D scanning, virtual and augmented reality, artificial intelligence, and digital archiving, the project will document, conserve, and disseminate both tangible and intangible heritage assets-including monuments, manuscripts, oral traditions, and indigenous practices.</p> <p>The initiative will develop a comprehensive, open-access digital repository featuring high-resolution models, multimedia content, and contextual information, making Indian heritage accessible to researchers, educators, policymakers, and the general public worldwide. Community engagement and crowdsourcing will be employed to ensure inclusivity and authenticity, while capacity-building workshops will train stakeholders in digital heritage methods.</p> <p>By fostering interdisciplinary collaboration among technologists, heritage experts, and local communities, the project will set new benchmarks for heritage science in India. The outcomes will support cultural sustainability, promote heritage tourism, and contribute to national and global knowledge networks, aligning with the objectives of the DST Science and Heritage Research Initiative SHRI.</p>

Part 2: Particulars of Investigators :

Principal Investigator :

1.	Name	Dr. M Purushotham Reddy
	Gender	Male
	Category	General
	Likely Date of retirement	01/01/1900
	Date of Birth	06/06/1981
	Designation	Professor
	Department	Information Technology
	Institute Type	Academic Institutions (Private)
	Institute/University	INSTITUTE OF AERONAUTICAL ENGINEERING
	State	Telangana

3. MOOC Certifications Proof

Research Article



ISSN: 2574 -1241

DOI: 10.26717/BJSTR.2024.58.009131

Enhancing Lung Cancer Detection: A Comparative Analysis of CNN and RNN Models on X-Ray Image Data

Bodicherla Siva Sankar^{1*}, D Natarajasivan² and M Purushotham Reddy³

¹Research Scholar, Department of Computer Science and Engineering, Faculty of Engineering and Technology, Annamalai University, India

²Assistant Professor, Department of Computer Science and Engineering, Faculty of Engineering and Technology, Annamalai University, India

³Professor and Head, Department of Information Technology, Institute of Aeronautical Engineering, India

***Corresponding author:** Bodicherla Siva Sankar, Research Scholar, Department of Computer Science and Engineering, Faculty of Engineering and Technology, Annamalai University, India, Email : s.bodicherla.sankar@gmail.com

ARTICLE INFO

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ABSTRACT

Lung cancer originates from abnormal growth in lung cells, characterized by uncontrolled cell division within lung tissues. Early detection of lung cancer is crucial for improving patient outcomes and survival rates. The cited papers highlight several limitations, such as small sample sizes, reliance on previous studies, the need for future validation, resource-intensive methods, potential biases, lack of longitudinal data, necessity for further experimentation, limited clinical practice integration, dependence on imaging quality, and insufficient data for robust model training and evaluation. To address these limitations, suggested strategies include using CNN and RNN methods to compile larger datasets, confirming results through prospective validation, developing resource-efficient statistical methods, reducing biases through careful study design, conducting extended outcome evaluations, validating automated pulmonary nodule management systems, integrating multiscale features into breast cancer risk assessments, addressing imaging quality issues in healthcare, evaluating deep learning models longitudinally for EEG motor imagery, and using larger datasets to improve automatic lung nodule detection systems. With advances in machine learning, CNNs and RNNs have become powerful tools for analyzing medical images. This study aims to enhance lung cancer detection by comparing CNN and RNN models on X-ray image datasets. CNNs are known for their ability to identify complex image features, making them suitable for tasks like object recognition and segmentation.

In contrast, RNNs excel at processing sequential data, offering potential benefits in identifying temporal patterns in medical datasets. The study involves training and evaluating both CNN and RNN models on a dataset of X-ray images from individuals with and without lung cancer. We will assess each model's performance in terms of accuracy, sensitivity, specificity, and computational efficiency. Additionally, we will explore the interpretability of these models to identify the features driving their classifications. Through this comparative analysis, we aim to provide insights into the strengths and weaknesses of CNNs and RNNs in lung cancer detection. Ultimately, our

5. Publications Proof





Student Success : **For The Month Of May 2025**

S. No	Description	Values
1.	HIP Projects	10
2.	IPD Projects	NIL
3.	Hackathons	NIL
4.	MOOC Certifications	2
5.	Industrial visits	NIL
6.	Student internships	1
7.	Partial Delivered courses	NIL
8.	Publications	NIL
9.	Conferences / seminars attended	NIL
10.	Student Startups	NIL
11.	Innovative ideas funded	NIL
12.	RBL / PBL Efforts	4/2

1.HIP Projects Proof :



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15 May, 2024

Visual Computing and Analytics - Summer Research Internship Program (SRI) during the Summer

List of Selected Students

Students selected for the "Visual Computing and Analytics" Summer Research Internship Program (SRI) – 2024 based on the recommendations given by the expert committee in the final phase of interview which was held on 10 May, 2024.

The following selected students should report to the coordinator and allotted mentors on or before 16 May, 2024.

S. No	Reg. No.	Name of the Student	Branch	Internal Mentor	External Expert
1.	22951A1215	G. Deekshitha	IT	Dr. M Purushotham Reddy	Dr. Kapil Dev Professor, Dept. of CSM, AI Ireland
2.	22951A1231	K. Keerthana	IT		
3.	22951A12A7	K. Uday Kiran	IT		
4.	22951A1273	K. Sai Kiran Naik	IT	Dr. U Sivaji	Dr. Amjad Gawwamsh, Associate Professor, Dept. CE Dubai
5.	22951A1276	D. Sai Swaroop	IT		
6.	22951A1268	P. Rahul	IT		
7.	22951A1282	V. Sai Deepak	IT	Dr. B Rama Devi	Dr. Shivakumara Palanisankota Associate Professor, Dept. CS & Technology Malaysia
8.	22951A1283	Satyabrat Panda	IT	Dr. Chalana Reddy	Mr. N Praveen Reddy Sr. Technical Manager, HCL Technologies, Hyderabad
9.	22951A12B6	S. Vishwanath Reddy	IT		
10.	22951A3397	D. Sonal	CSIT	Dr. Basoetty Mallikarjuna	Mr. C Jaganath, Software
11.	22951A1240	P. Lakshmi Deepthika	IT	Dr. S Sateesh Kumar	Developer, Smart Interviews, Hyderabad
12.	22951A33A2	A. Srujana Suchismita	CSIT		

Coordinator

Visual Computing and Analytics – Summer Research Program (SRI)-2024

Dr. M Purushotham Reddy

hod-it@iaae.ac.in

4.MOOC Certifications:



Elite NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)

This certificate is awarded to
BHAVYA SREE UMMDI
for successfully completing the course

Cloud Computing

with a consolidated score of **69** %

Online Assignments	23.94/25	Proctored Exam	44.78/75
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Total number of candidates certified in this course: **29703**

Jan-Apr 2025

(12 week course)



Skill India
कौशल भारत - कुशल भारत



Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL25CS11S947004795

To verify the certificate



No. of credits recommended: 3 or 4



Elite NPTEL ONLINE CERTIFICATION

(Funded by the MoE, Govt. of India)



This certificate is awarded to
TATIPADIGALA ABHILASH GOUD
for successfully completing the course

Programming In Java

with a consolidated score of **61** %

Online Assignments	23.47/25	Proctored Exam	37.5/75
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Total number of candidates certified in this course: **16040**

Jan-Apr 2025

(12 week course)

Prof. Haimanti Banerji
Coordinator, NPTEL
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NP



Ask AI Assistant

Simplify the document for me



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ed: 3 or 4

6. Student internships Proof

INTERNSHIP AGREEMENTs

This Internship Agreement (“**Agreement**”) is made at Hyderabad on the **15th May 2025** by and between:

Sears IT & Management Services (India) Private Limited, a company duly incorporated under the laws of India and having its registered office at EON SEZ, Cluster – D, Wing – 2, 4th Floor, Kharadi Knowledge Park, Kharadi (hereinafter referred to as the “**Company**”, which expression shall, unless the same be repugnant to the context or meaning thereof, be deemed to include its successors-in-interest and permitted assigns);

AND

Ms.T Kushi, individual residing at H No. 1-13 , Chintakunta , Jogipet, Andole , Sangareddy, Telangana - 502270. (Herein after referred to as the “**Intern**”). The “**Company**” and the “**Intern**” may hereinafter be referred to individually as a ‘party’ and collectively as ‘parties’. Capitalized terms will have the meaning set forth in Section 1 of this Agreement.

RECITALS

WHEREAS:

- A.** The Company is engaged in the business of **Information Technology** and has recently commenced a training program titled the “SHI Internship Engagement Program – (“**SIEP**”) for training fresh engineering graduates;

Any notice, request, demand or other communication (collectively "Notices") to be given under this Agreement shall be deemed to be duly given by either party hereto if:-

sent by registered post addressed to the other party hereto at:

In the case of a Notice to the Company –

Attn:

HR Head

Sears IT & Management Services India Pvt Ltd,
EON SEZ, Cluster – D, Wing – 2, 4th Floor, Kharadi Knowledge Park, Kharadi

In the case of a Notice to the Intern -

T Kushi

At H No. 1-13, Chintakunta, Jogipet, Andole, Sangareddy, Telangana - 502270.

Any such Notice sent by registered post shall be deemed to have been given 48 (forty eight) hours after the time of posting and, in proving service, it shall be sufficient to prove that the envelope containing such Notice was properly addressed, stamped and put in the post.

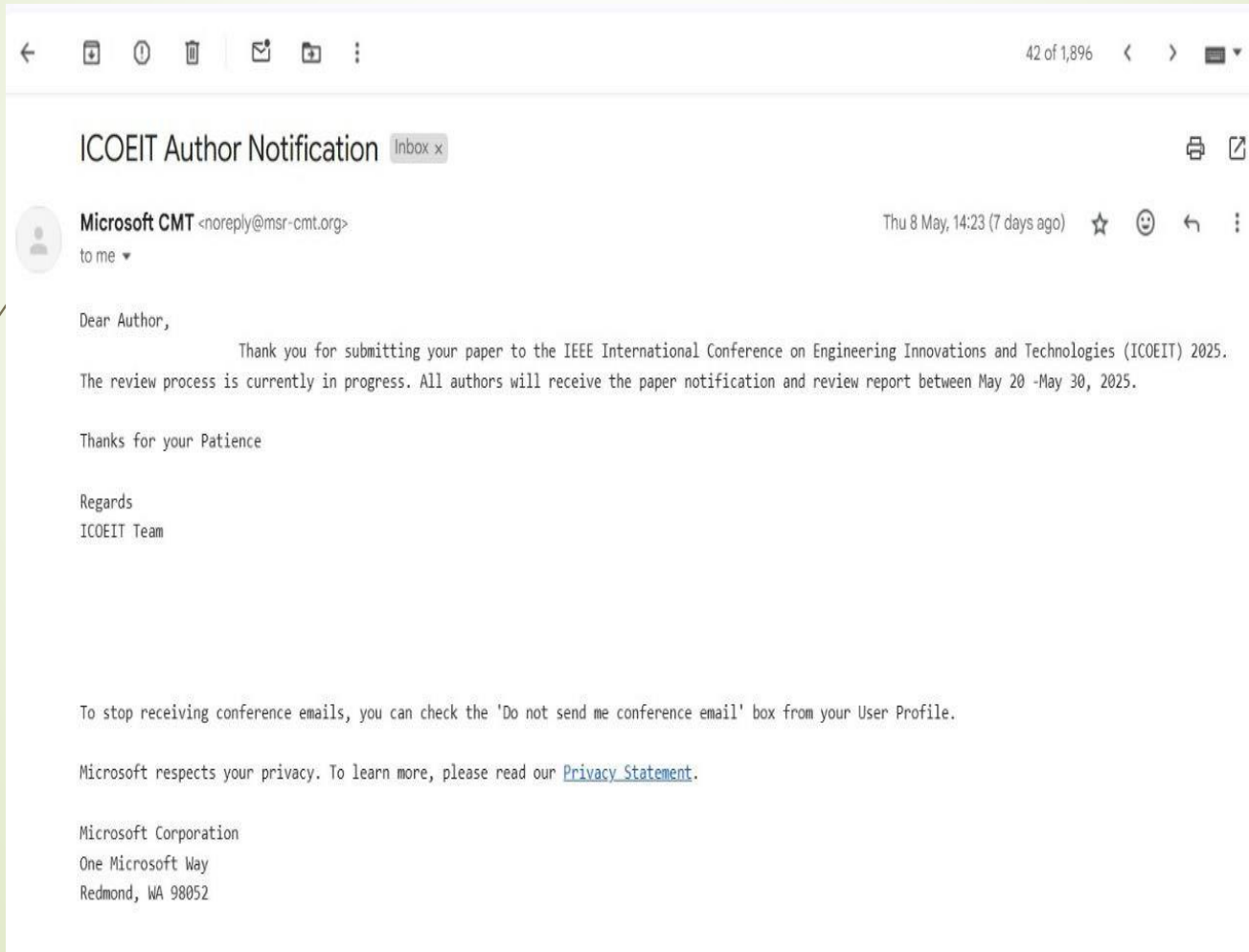
18. **No Employment**

It is agreed between the Parties that nothing contained herein shall be deemed to construe an employment relationship between the Parties and the Company shall, accordingly, not be responsible to provide any statutory or other benefits to the Intern as are ordinarily available to the Company's employees. Further, nothing in this Agreement shall be deemed to guarantee any form of employment with the Company to the Intern.

19. **Waiver**

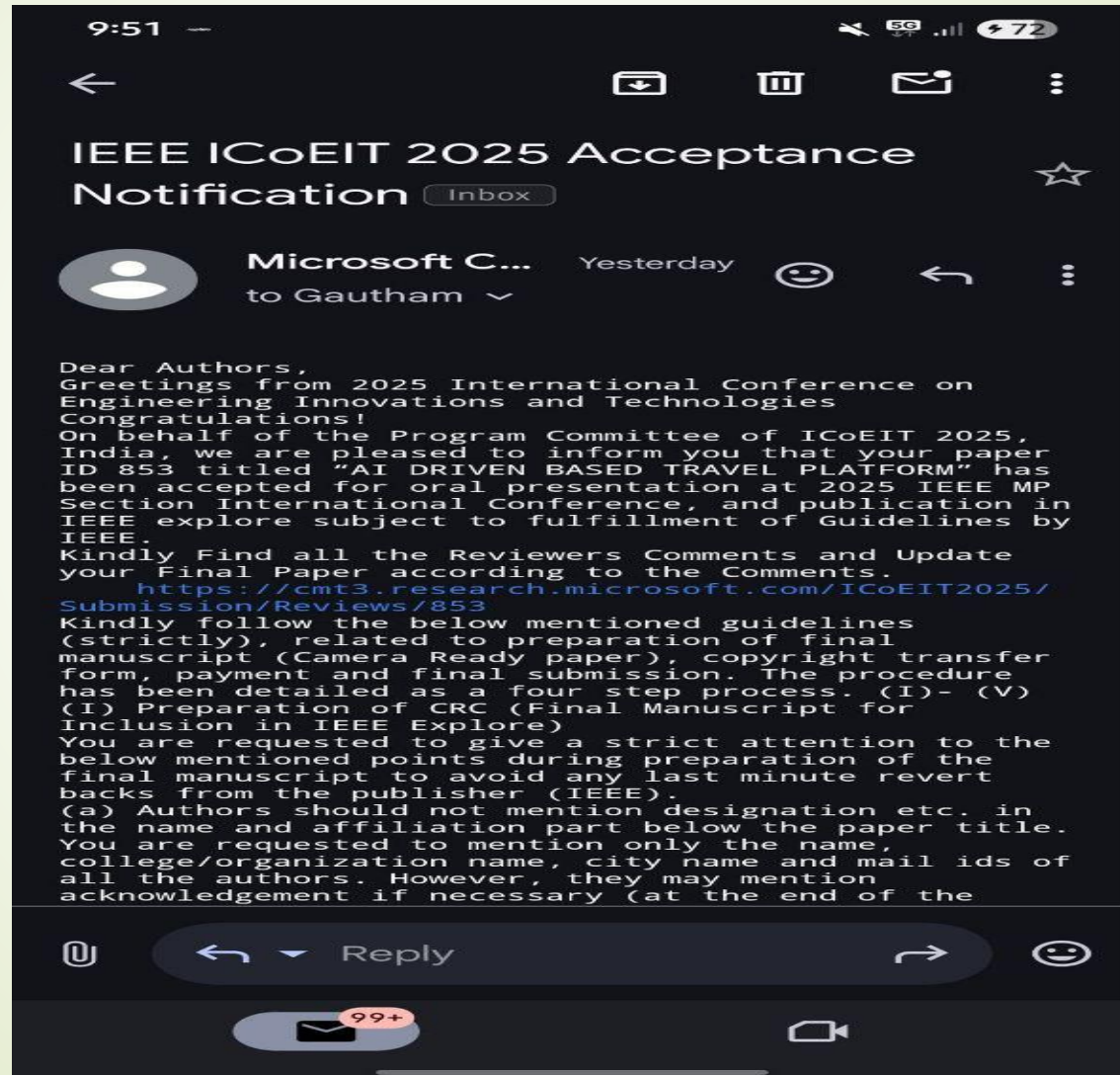
12. RBL Efforts Proof:

Project Title: Health Analysis Dashboard using Data Analytics
Roll No.: 22951A3316, 22951A3335, 22951A3338, 22951A3360

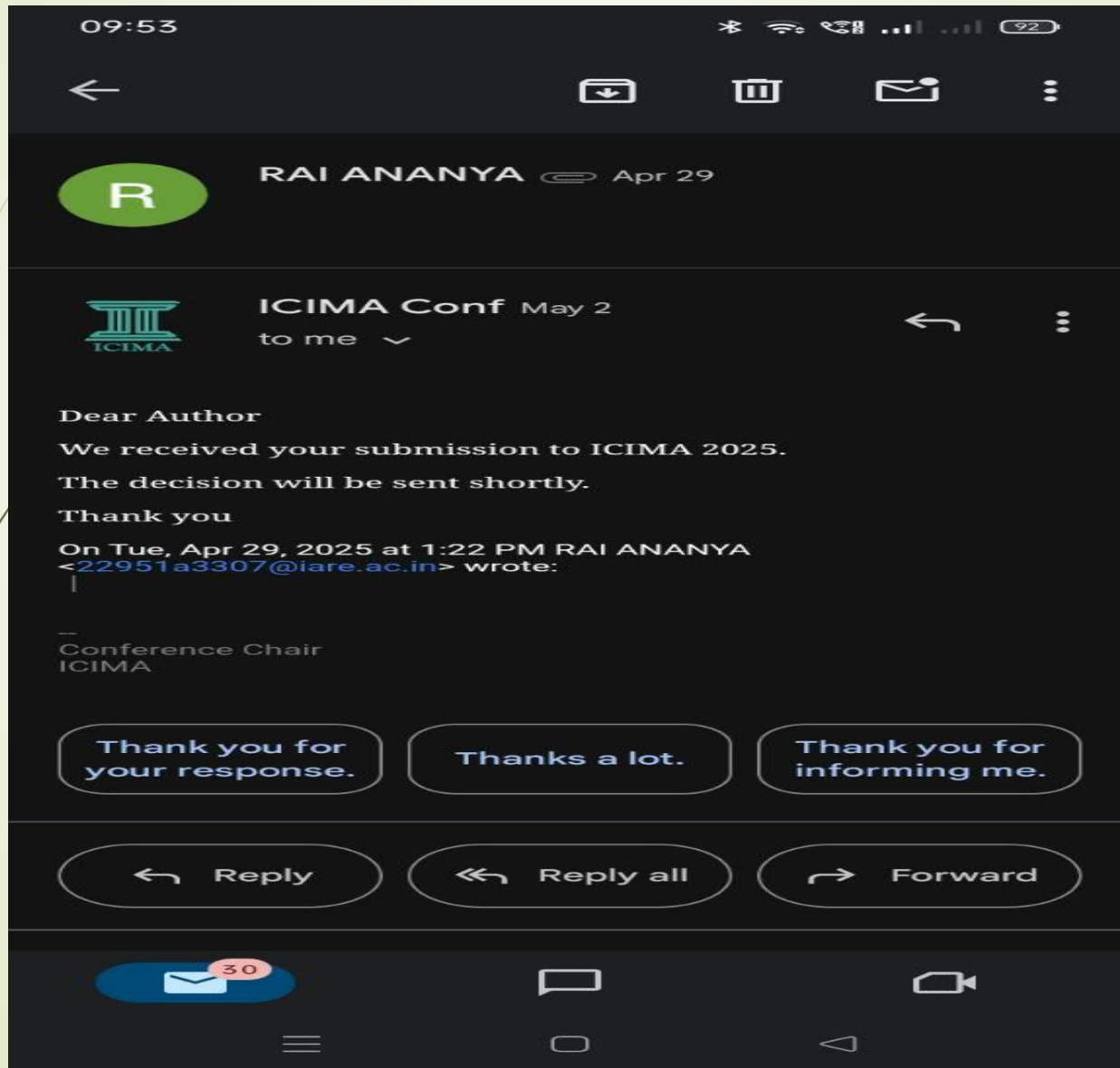


Project Title: AI POWERED TRAVELLING PLATFORM

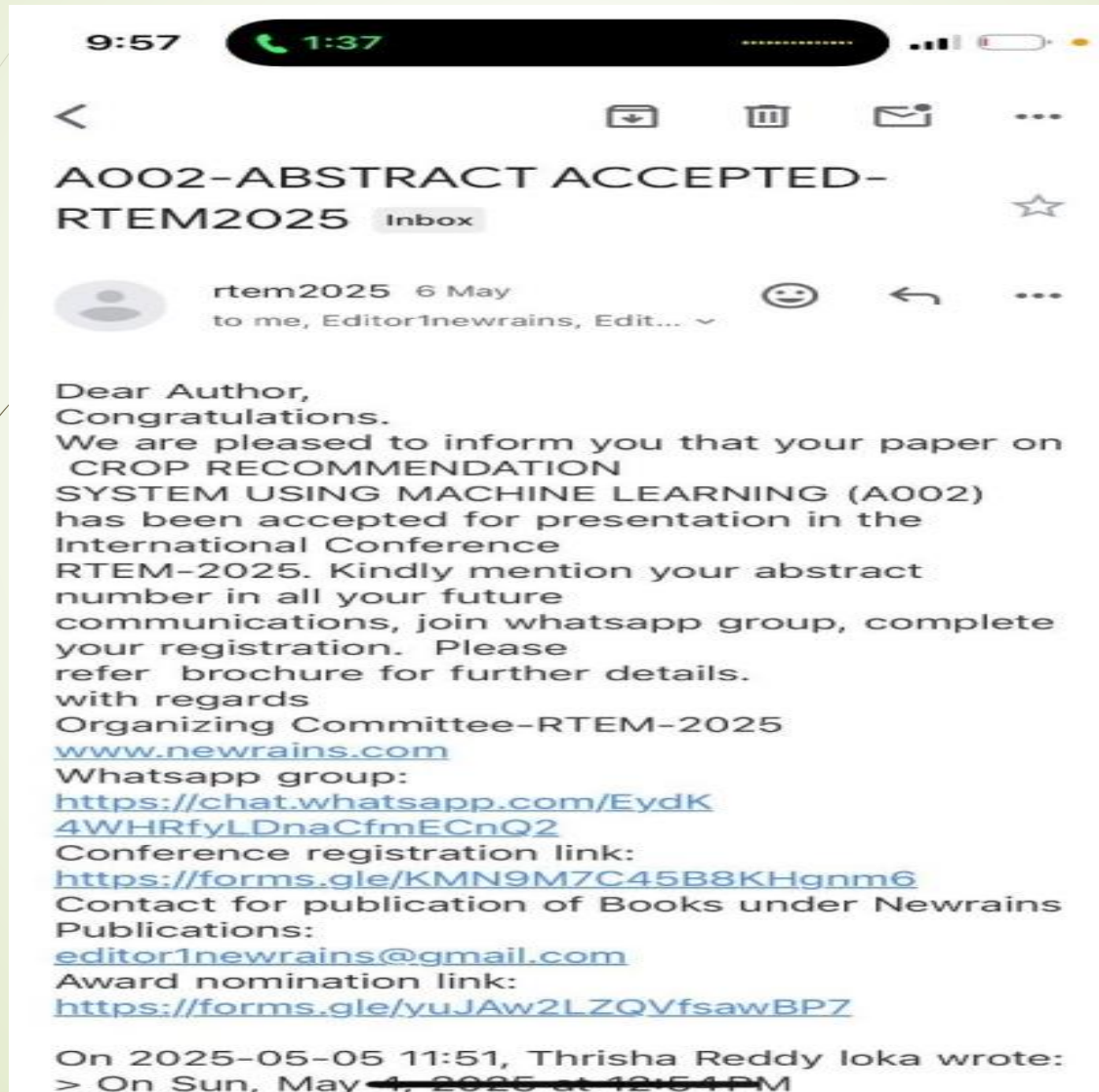
Roll No.: 22951A3301, 22951A3329, 22951A3351



Project Title: Serverless Application Using Cloud Roll
No.: 22951A3324, 22951A3307, 22951A3356



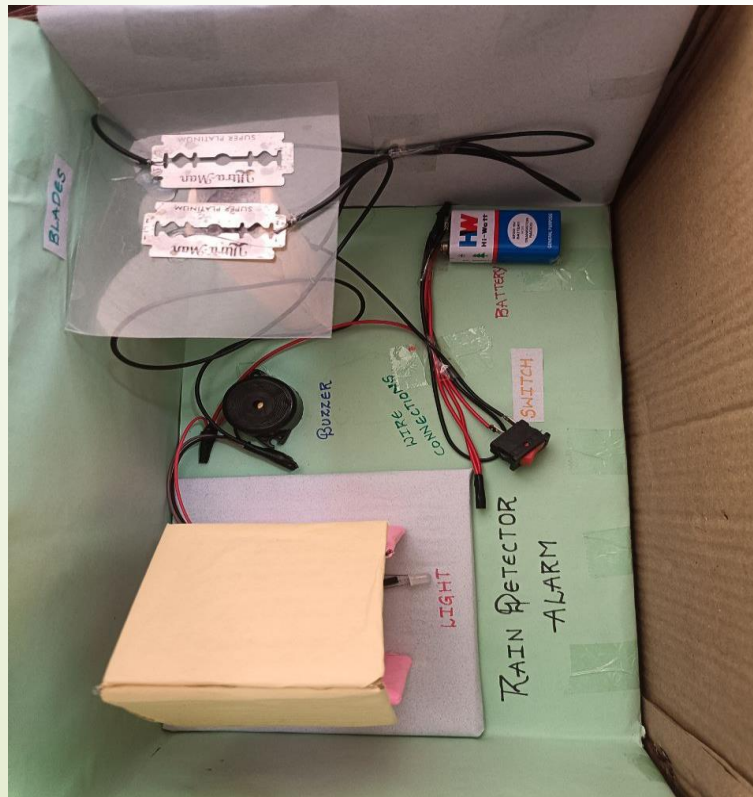
Project Title: Crop Recommendation System using ML
Roll No.: 22951A3348, 22951A3306, 22951A3346



12. PBL Efforts Proof:

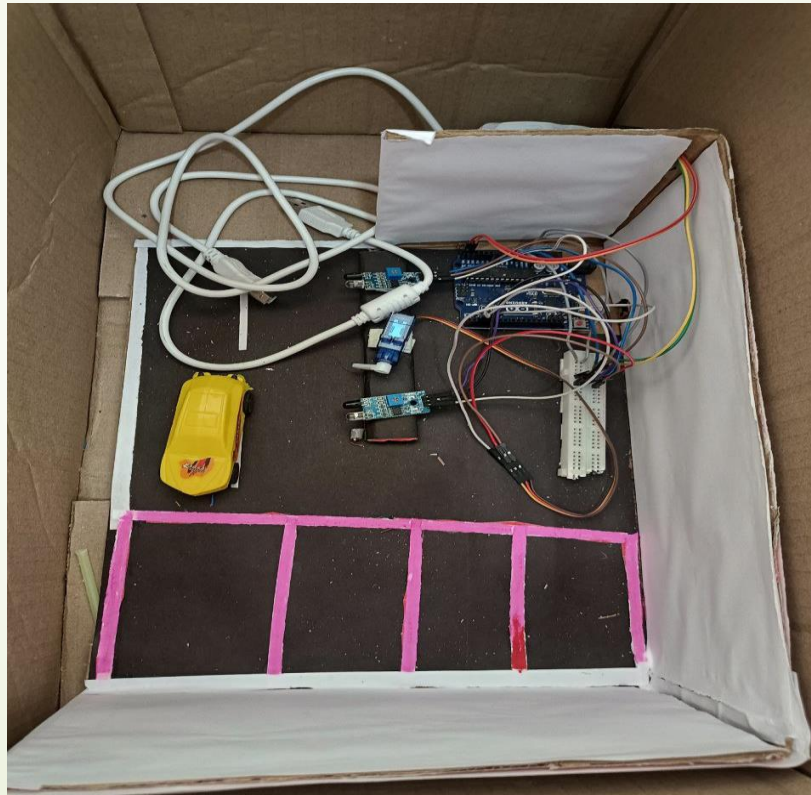
Project title: Smart CAR Parking system

Roll numbers: 22951A1257, 22951A1259



Project title: Rain detection alarm

Roll numbers: 22951A1218, 22951A1242



THANK YOU