# SSM INSTITUTE OF ENGINEERING AND TECHNOLOGY,
## Dindigul – Palani Highway, Dindigul – 624 002.

## Circular

1.2.2023

We are glad to inform you that based on the MOU with <mark>Maxelerator Foundation, Madurai</mark> an FDP has been planned exclusively for 20 faculty members on <mark>"AI & ML" from 6.2.2023 to 10.2.2023.</mark> Henceforth, Registered faculty members are requested to kindly make use of this opportunity and enrich their knowledge.

Note : Registered faculty members are requested to bring your Laptop for Hands On Session.

Resource Persons:

**Mr.Nanu Swamy**
**Managing Director of Maxelerator Foundation, Madurai**

Date & Time: 6.2.2023 to 10.2.2023 & 09.30 AM – 4.30 PM
Venue: CSE Lab – I

Program Coordinators                     HOD/CSE                     Principal

Copy to: Chairman for kind information

Administrative Officer

HoD's

AUTO          Civil          CSE          ECE          EEE          MECH

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., 
Principal
SSM Institute of Engineering and Technology
Enttathupatti Village, Sindalaguodu (Po),
Palani Road, Dindigul - 624 002.

From

G. Prabu,

Associate Professor/CSE,

SSMIET,

Dindigul.

To

The Principal,

SSMIET,

Dindigul.

Respected Sir,

Subject:   To organize Five-day FDP on "AI&ML" requested- reg;

I would like to bring to your kind notice that the Department of CSE planned to organize a **Five Day FDP on "AI & ML"** from 6.2.2023 to 10.2.2023 for our faculty members. **Mr.Nanu Swamy, Managing Director of Maxelerator Foundation, Madurai** has accepted our invitation to act as a resource person. So, I request you to give approval to organize this program.

Thanking You

Dindigul

31/1/2023

Yours Sincerely

[Dr. G. Prabu]

PROGRAM COORDINATORS              HOD/CSE              PRINCIPAL

Dr.D.SENTHIL KUMARAN M.E.,(E.D.,(BU.S)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindualagundu (Po),
Palani Road, Dindigul - 624 002.

# ARTIFICIAL INTELLIGENCE
&
# MACHINE LEARNING

Every industry has been touched by AI-powered technology one way or the other. From software that can detect cancer cells to developing driverless vehicles in the automotive industry, to natural language processing - ML and AI has become the crucial cornerstone. AI is predicted to contribute $15.7 trillion to the global economy by 2030 and the number of lob opportunities are skyrocketing.

In this 5 day hands on workshop, well learn from hands on examples that will help you overcome the fear of embarking on building custom AI solutions for various types of problems. A basic knowledge of programming in python will be useful.

## Tentative Agenda:

| Date | Topics |
|------|--------|
| 06-02-2023 | 1. Introductions<br>2. Pre-Evaluation<br>3. Traditional Programming vs Machine Learning?<br>4. Introduction to OpenAI/GPT3<br>5. Python Basics<br>6. Hands On Exercises |
| 07-02-2023 | 1. Machine Learning Lifecycle<br>2. ML Types and Algorithms<br>3. Machine Learning tools / libraries: Tensorflow, Keras<br>4. Browser Based Machine Learning<br>5. Design of Real Time Machine Learning System - 1<br>6. Hands On Exercises |
| 08-02-2023 | 1. Data Annotation Tools ,<br>2. Introduction to Neural Networks<br>3. ML Models |

Dr.D.SENTHIL KUMARAN. M.E
Principal
SSK Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (po),
Palani Road, Dindigul - 624 002.

| | |
|---|---|
| | 4. Image Classification (Transfer Learning, KNN Classifier) <br> 5. PoseNet, Face-api, FaceMesh, HandPose <br> 6. Design of Real Time Machine Learning System - 2 |
| 09-02-2023 | 1. AI Demos - Image Classification on Edge <br> 2. Pytorch as a Deep Learning Framework, <br> 3. Building Neural Network From Scratch, <br> 4. Custom Object Detection - YoloV5 <br> 5. In & At Memory Computation <br> 6. Design of Real Time Machine Learning System - 3 <br> 7. Hands on exercises |
| 10-02-2023 | 1. Transfer Learning, Natural Language Processing, <br> 2. Explainable AI <br> 3. Design of Real Time Machine Learning System - 4 <br> 4. Wrap up Applications Discussion <br> 5. Project Demos <br> 6. Closing Ceremony |

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., [PDF]
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

## Department of Computer Science and Engineering

### Report

Date: 12/1/2023

Two days workshop on "Innovation Activity- Build Club" was conducted from 11/1/23 to 12/1/23 in ECE Communication Lab for all the department 3rd Year 50 students. Our chief guest Mr. Nanu Swamy, Managing Director of Maxelerator Foundation, Madurai delivered an introduction about the activities to be carried out for the 2 day hands-on training session on Innovation Activity and Ms. Naveena Swamy , Founder , Maxelerator Foundation , Mr. Emmanual Robin Joseph , Program Director , Maxelerator Foundation and IITM Incubation Cell , IITM Research Park Team handled the session. .

Inauguration



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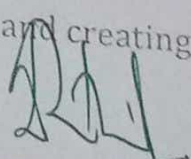Lat 10.397142°
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Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
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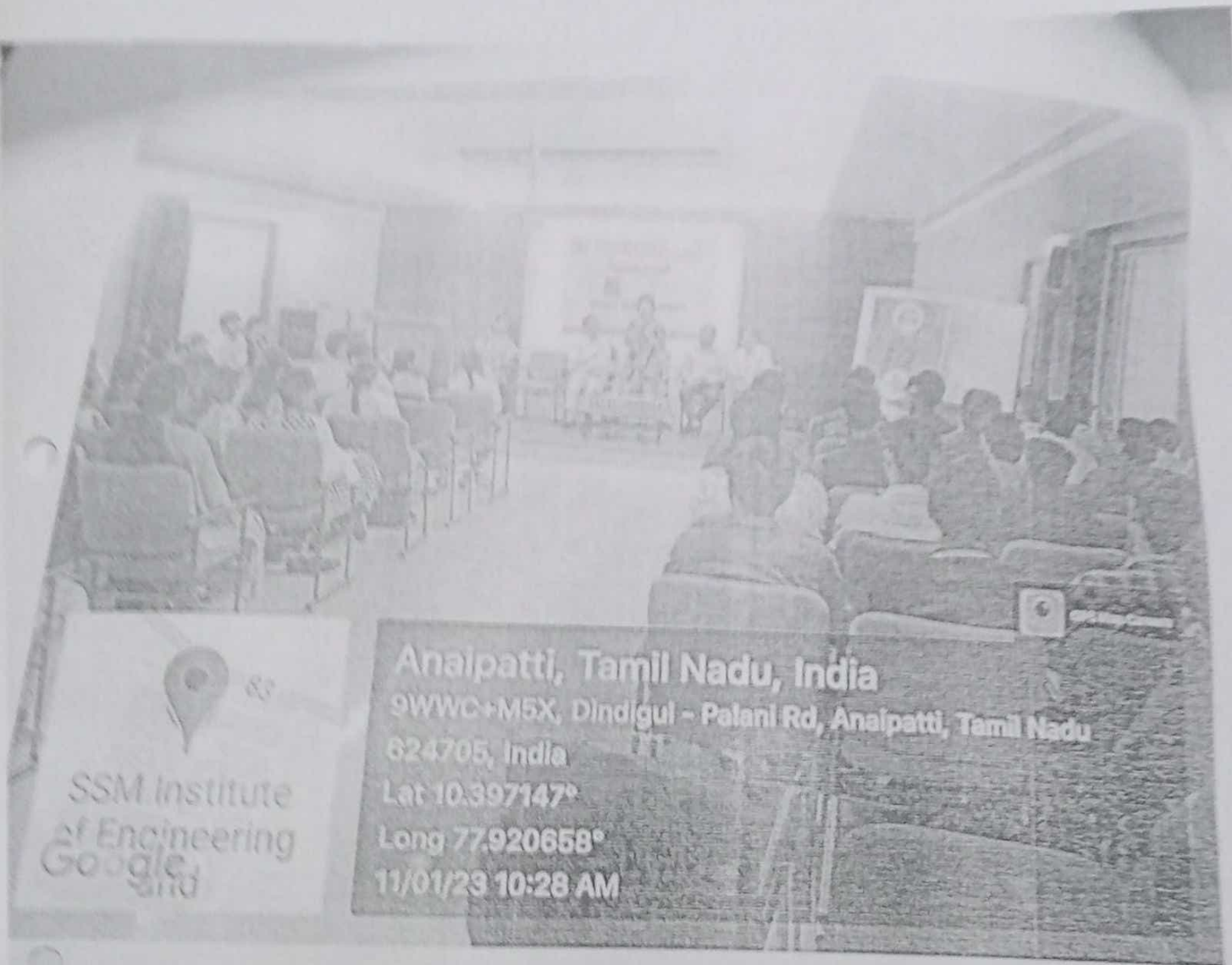
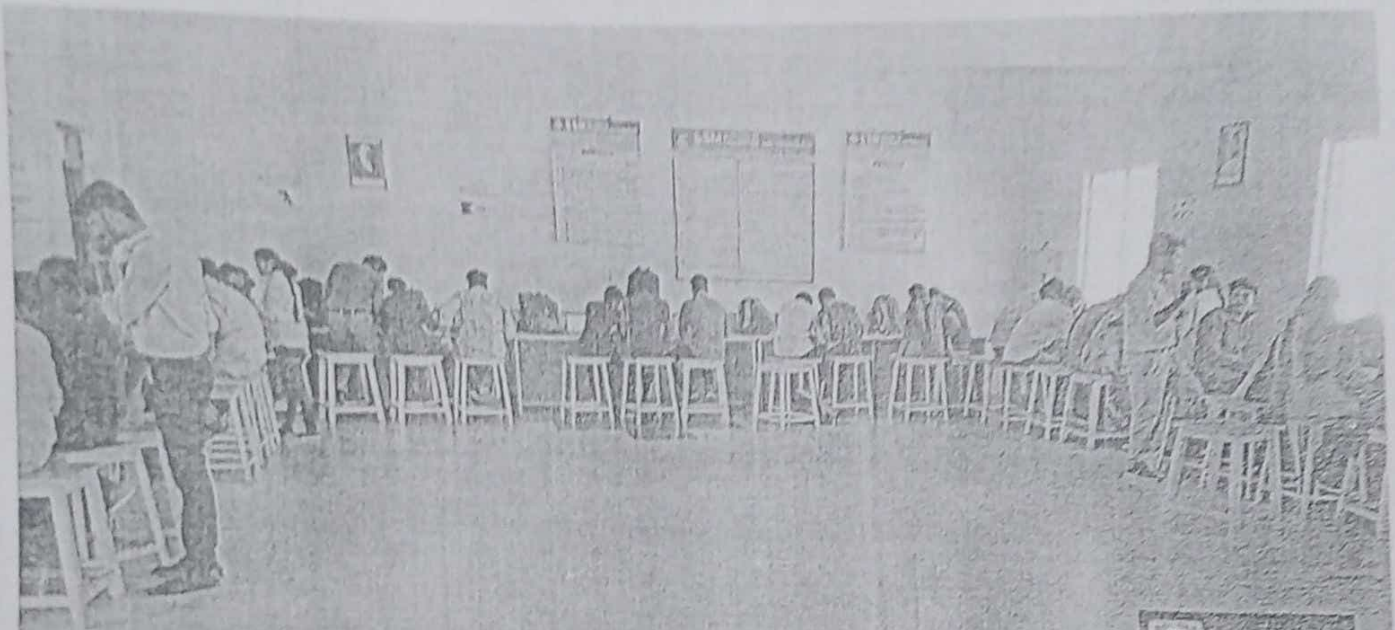Anaipatti, Tamil Nadu, India
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Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

DAY - 1 Agenda

| Schedule (24 hrs) | Description | Speaker / Facilitator |
|---|---|---|
| 11 Jan '23, Monday, Day 1 | | |
| 10:00 to 10:05 | Tamil Thai Vazthu | Students |
| 10:05 to 10:10 | Welcome note | Dr. C. Sujatha HOD / CSE |
| 10:10 to 10:25 | Presidential Address | Dr Senthil Kumaran, Principal |
| 10:25 to 10:30 | Introduction about chief guest | Students |
| 10:30 to 10:40 | Build Club and its significance | Mr Nanu Swamy & Ms Naveena Swamy, Founders |
| 10:40 to 10:45 | Introduction to core team, SSMIET Build Club | Dr. G. Prabu SPOC |
| 10:45 to 10:50 | Vote Of Thanks | Dr. G. Prabu SPOC |
| 10:50 to 13:00 | Workshop of Build Projects | Maxelerator & IITMIC Team |
| 13:00 to 14:00 | Lunch | |
| 14:00 to 16:30 | Workshop of Build Projects [1] | Maxelerator & IITMIC Team |
| 16:30 to 17:00 | Students Exhibit (Non-Academic Projects) [2] | |

Team Head gave an introduction about the team members of the Build club and handed over the session to resource persons Mr Nanu Swamy and Ms. Naveena Swamy, who has trained the students on the basics of Innovation Activity in detail and creating new ideas on their own.
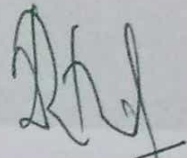
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Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
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And from 12.00 p.m to 4.30 p.m the students worked on how to create a project using Softwares and showed their results individually to the trainer and clarified their doubts in that.



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Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

## DAY - 2 Agenda

| 12 Jan 23, Tuesday, Day 2 | | |
|---|---|---|
| 10:00 to 13:00 | Workshop of Build Projects | Maxelerator & IITMIC Team |
| 13:00 to 14:00 | Lunch | |
| 14:00 to 16:00 | Workshop of Build Projects | Maxelerator & IITMIC Team |
| 16:00 to 16:30 | Open Discussion & Queries , Feedback | All |

### Notes

1. Project based learning for the pre-built projects
   1. Smart Display (Dot Matrix Board)
   2. Plant Monitoring
   3. Weather Monitoring System.
   4. People Counting System
   5. Human Body Temperature System
   6. Dancing LED's
   7. Maze Robot
   8. Water meter
   9. Energy Meter
   10. RFID Tag Reader

2. Queries and Demos – Based on the workshops, the floor is open for queries and also exhibiting the projects that are built in these workshops

Dr. D. SENTHIL KUMARAN, M.E., Ph.D., MISTE
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu Po,
Palani Road, Dindigul - 624 002.
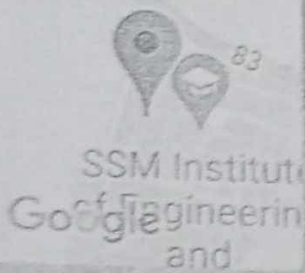
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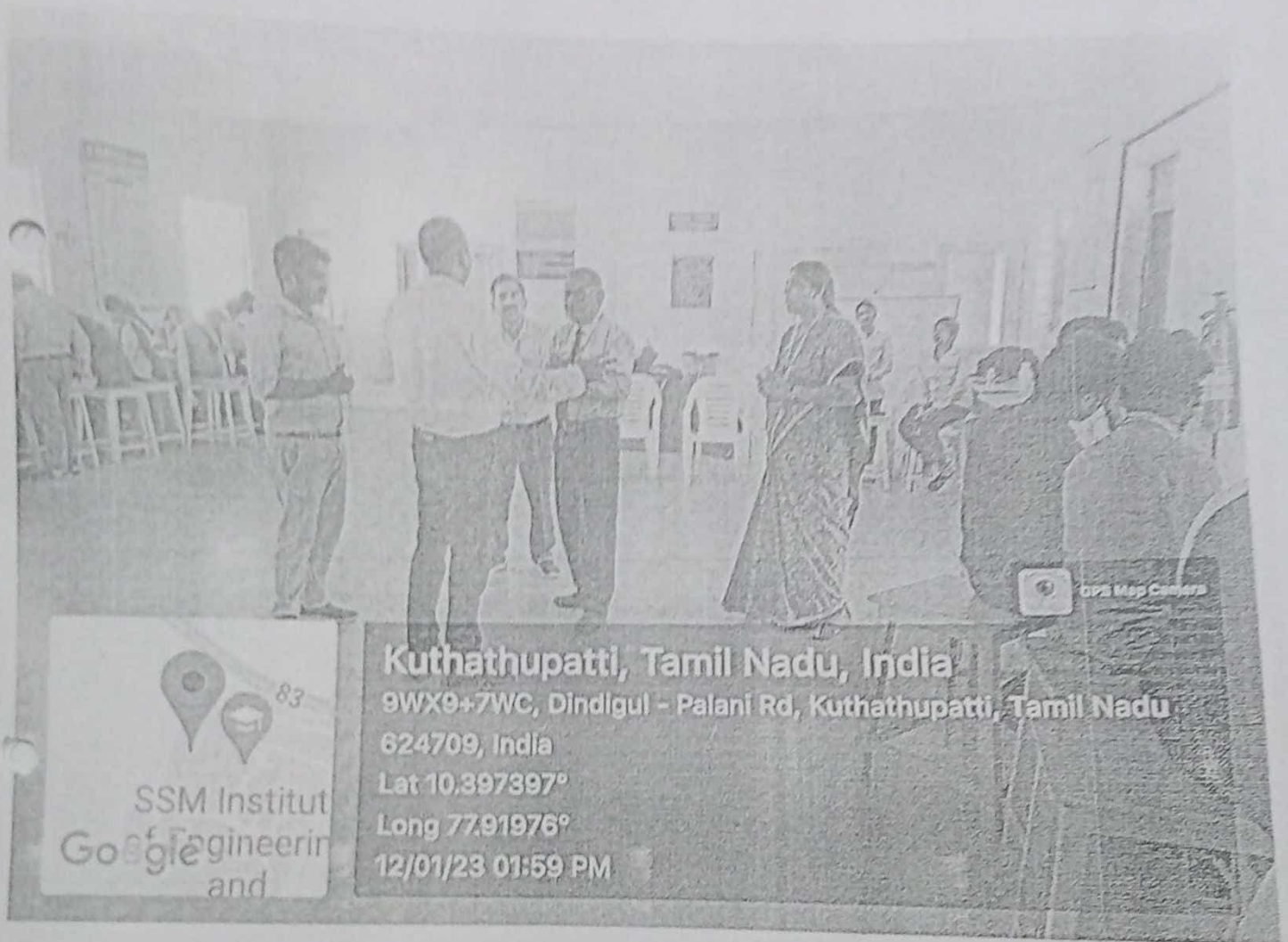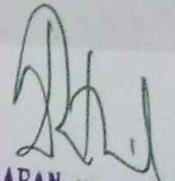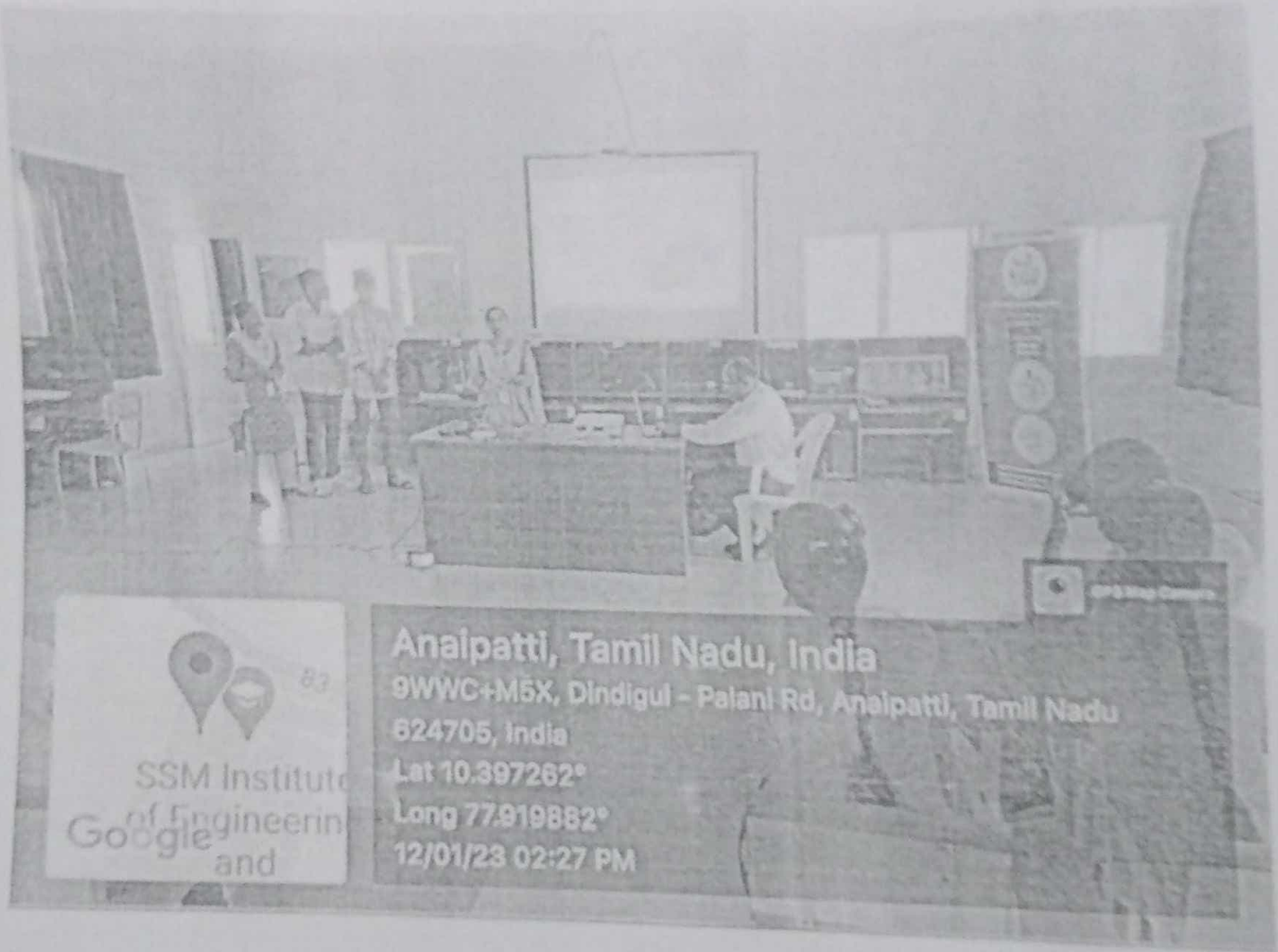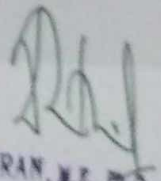Long 77.919848°
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Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sinaalagundu (Po),
Palani Road, Dindigul - 624 082.

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Students actively asked their doubts about the creation application with innovative ideas
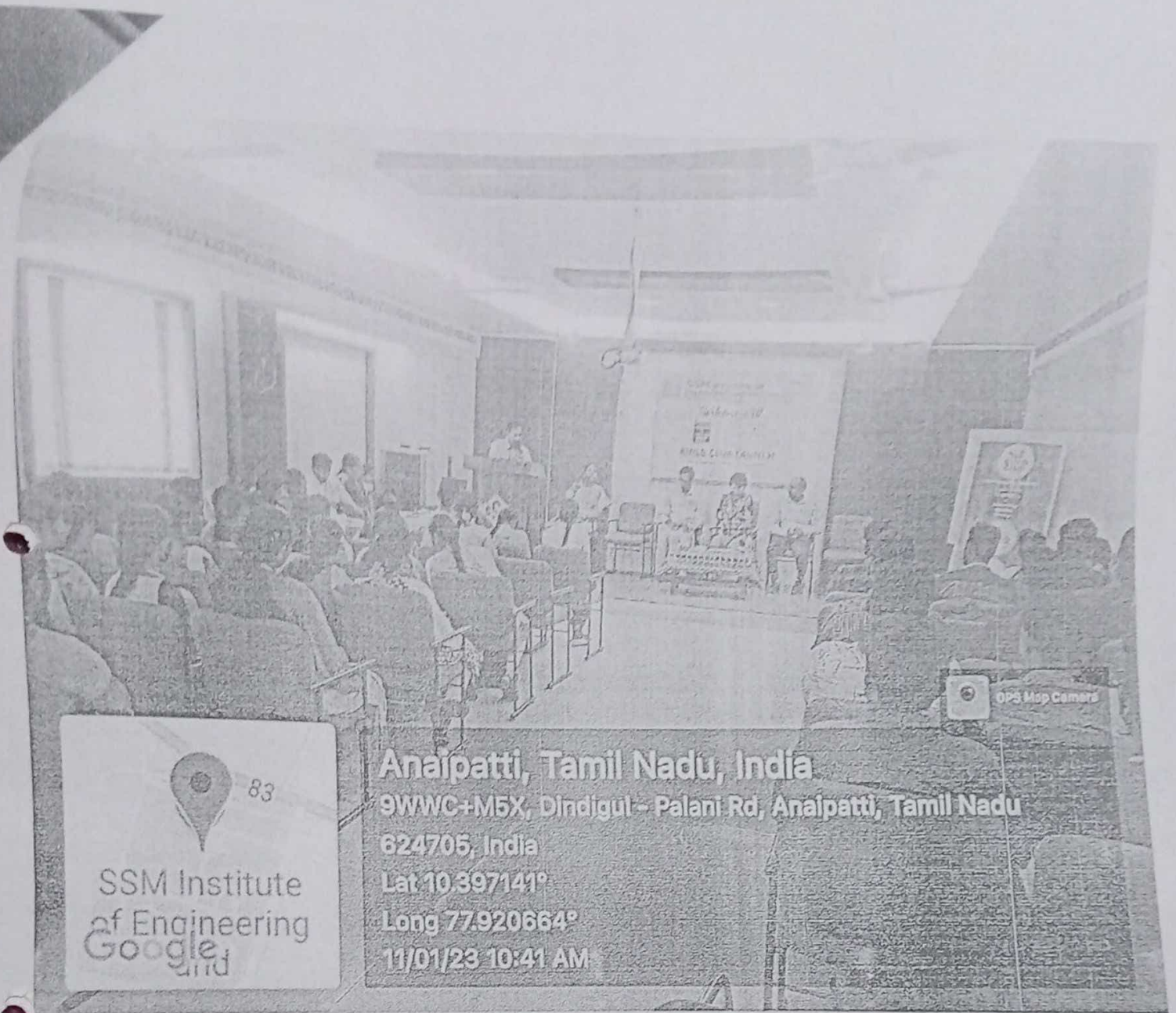
and the trainer resolved their queries instantly.
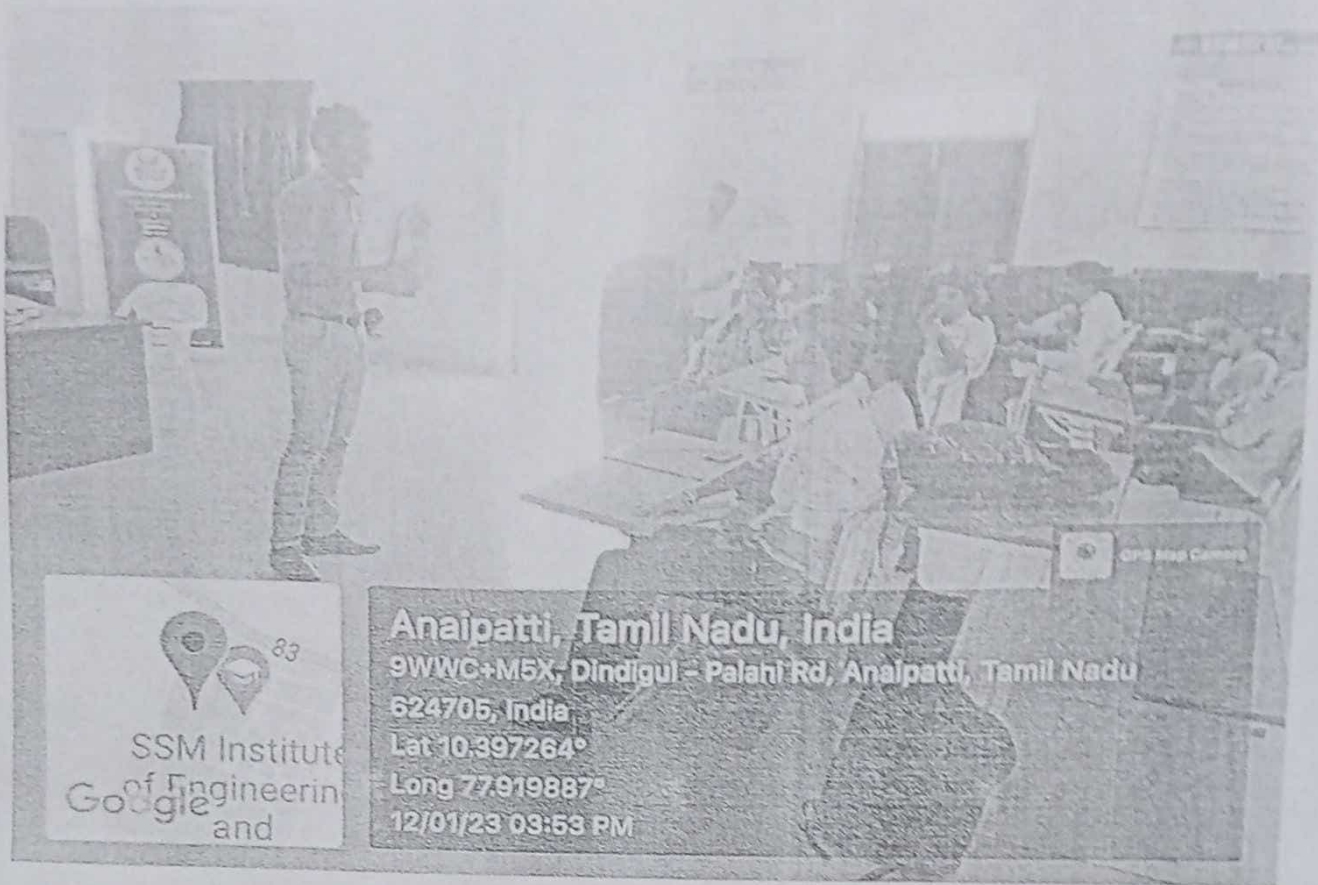
Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

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Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.

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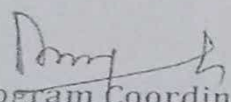SSM Institute of Engineering and Technology
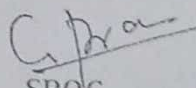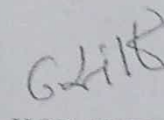Kuttathupatti Village, Sindalagundu (Po),
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In conclusion of the above students gave a feedback individually about the session that they need session to be in long run for understanding concepts in advanced manner and asked to conduct more workshop consecutively.
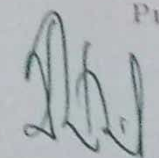
Program Coordinator          SPOC          HOD/CSE          Principal

Dr.D.SENTHIL KUMARAN, M.E., Ph.D., (NUS)
Principal
SSM Institute of Engineering and Technology
Kuttathupatti Village, Sindalagundu (Po),
Palani Road, Dindigul - 624 002.