

IGNITE 2023



A DAILY NEWSLETTER

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**Dr. Srinivasan Alavandar
Principal, ACT**

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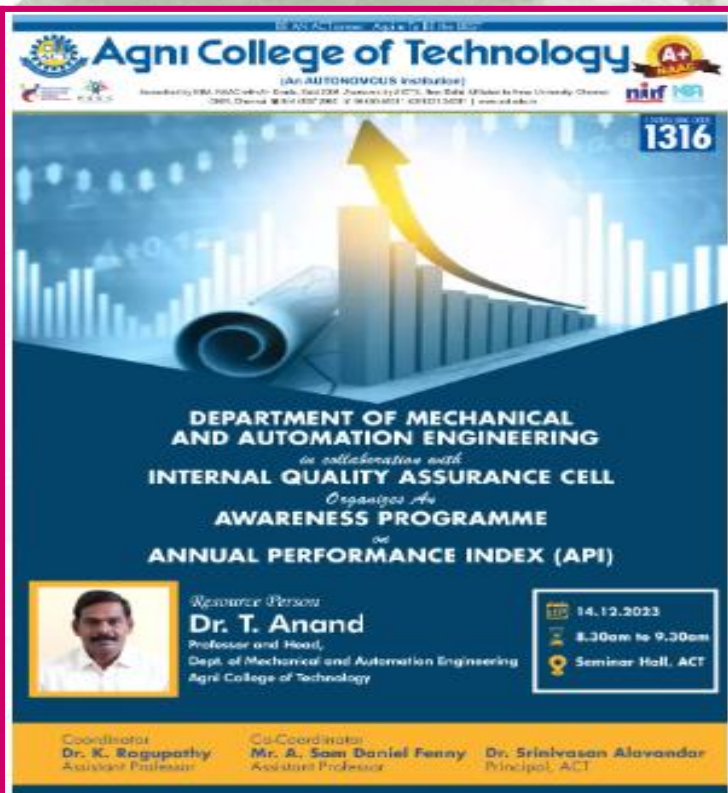


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IQAC SEMINAR SERIES



An awareness program on **“Annual Performance Index”** was organized by the department of Mechanical and Automation Engineering with the collaboration of the **Internal Quality Assurance Cell (IQAC)** and took place in the seminar hall of ACT. The resource person for the seminar was Dr. T. Anand, Professor and Head, Mechanical and Automation Engineering, Agni College of Technology. The faculty members from all the departments participated in the seminar.

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FACULTY ACHIEVEMENT



NPTEL Online Certification
(Funded by the MoE, Govt. of India)

This certificate is awarded to
NITHIYA R
for successfully completing the course
**Electrocardiogram - Interpretation and Application in
Clinical Practice**
with a consolidated score of **57** %

Online Assignments	15.75/25	Proctored Exam	41.25/75
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Total number of candidates certified in this course: 465

Jul-Aug 2023
(4 week course)

Prof. Devendra Jalihal
Chairperson,
Centre for Outreach and Digital Education, IITM

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

Indian Institute of Technology Madras

swayam

Roll No: NPTEL23GE27S45335659 To verify the certificate

No. of credits recommended: 1 or 2



**NPTEL-AICTE
Faculty Development Programme**
(Funded by the MoE, Govt. of India)

This certificate is awarded to
NITHIYA R
for successfully completing the course
**Electrocardiogram - Interpretation and Application in
Clinical Practice**
with a consolidated score of **57** %

Jul-Aug 2023

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

Roll No: NPTEL23GE27S45335659 Duration of NPTEL course : 4 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams.
This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24th July 2016, similar to other refresher / orientation courses.
F.No. AICTE / RIFD / FDP through MOOCs / 2017-18

Mrs. Nithiya R., Assistant Professor, Department of Biomedical Engineering, has successfully completed the NPTEL Certification 4-week course on “**Electrocardiogram - Interpretation and Application in Clinical Practice**” with an aggregate score of 57%.

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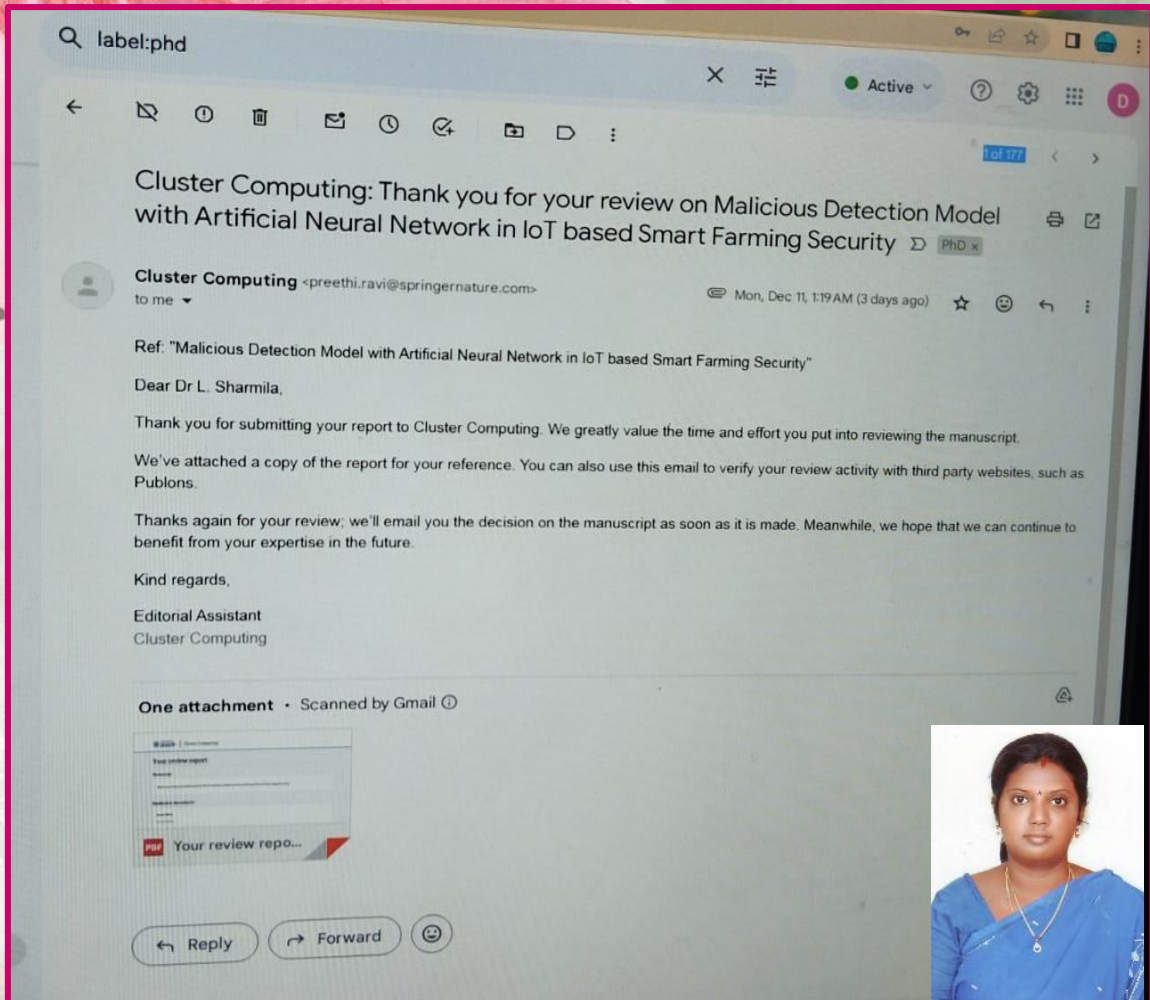


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FACULTY ACHIEVEMENT



Dr.L. Sharmila, Professor and Head, Department of CSE, **reviewed** a research paper in "**Cluster Computing**" (Springer, SCIE journal) on December 11, 2023.

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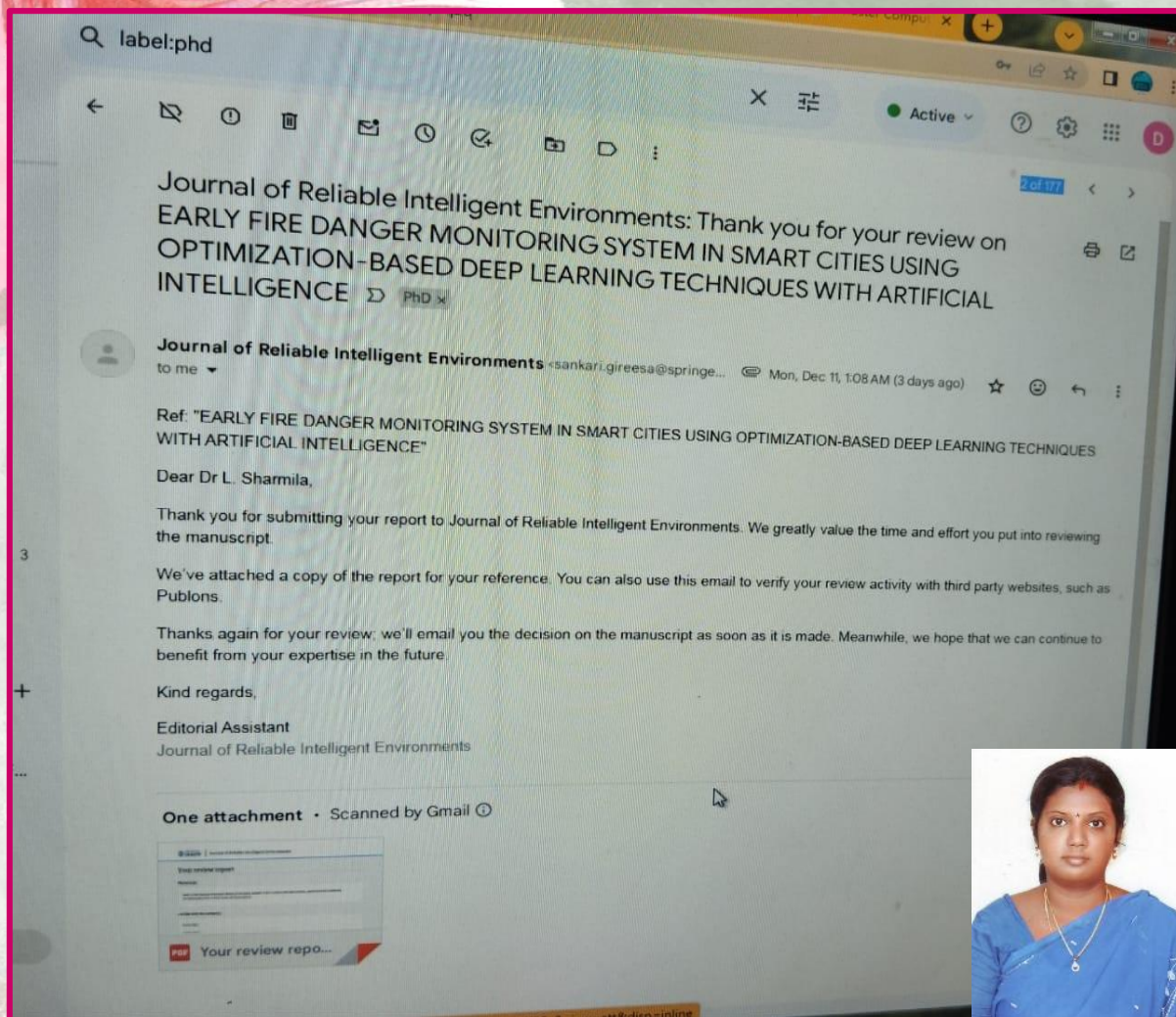


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FACULTY ACHIEVEMENT



Dr.L. Sharmila, Professor and Head, Department of CSE, has **reviewed** a research paper in the "**Journal of Reliable Intelligent Environments**" (Springer, Scopus journal) on December 11, 2023.

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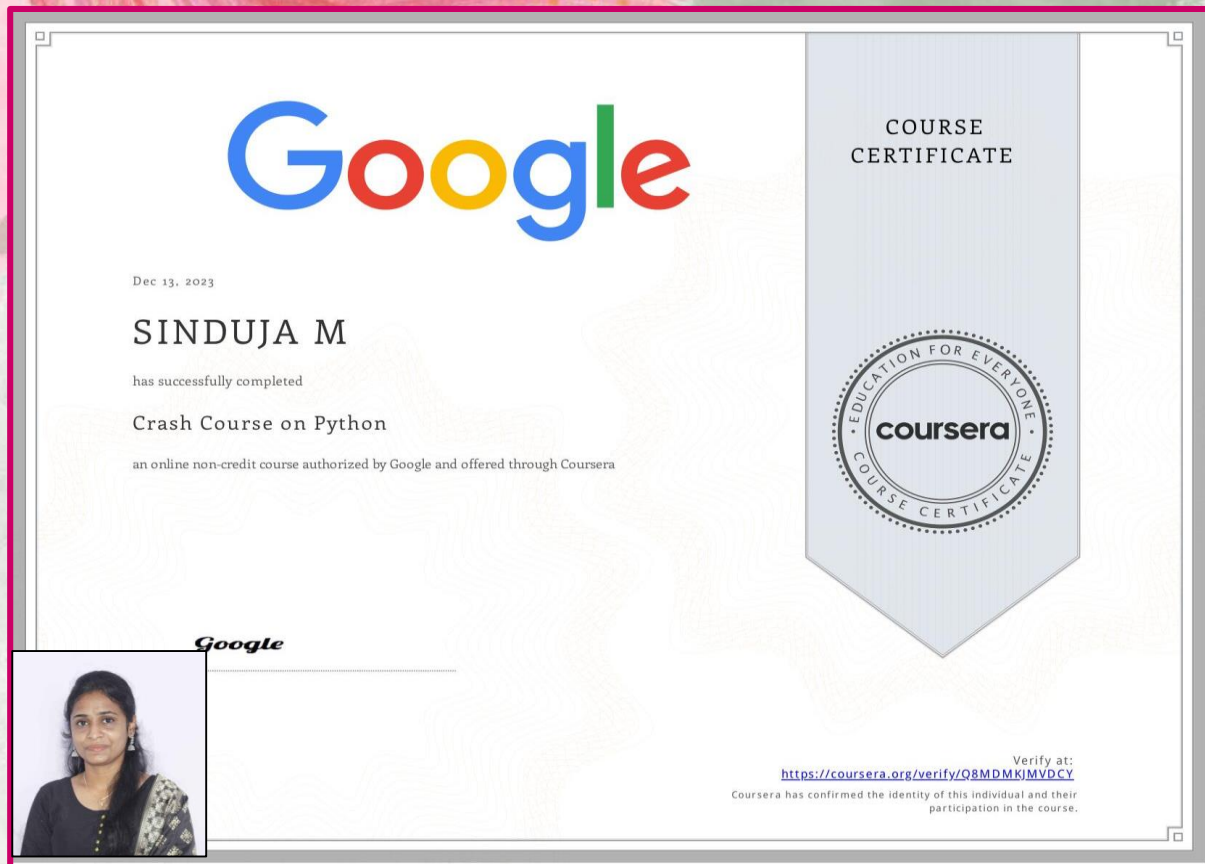


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FACULTY ACHIEVEMNET



Ms.M.Sinduja, Lab Assistant, Department of Information Technology, has completed an online course in “Crash Course on Python,” organized by Google on December 13, 2023.

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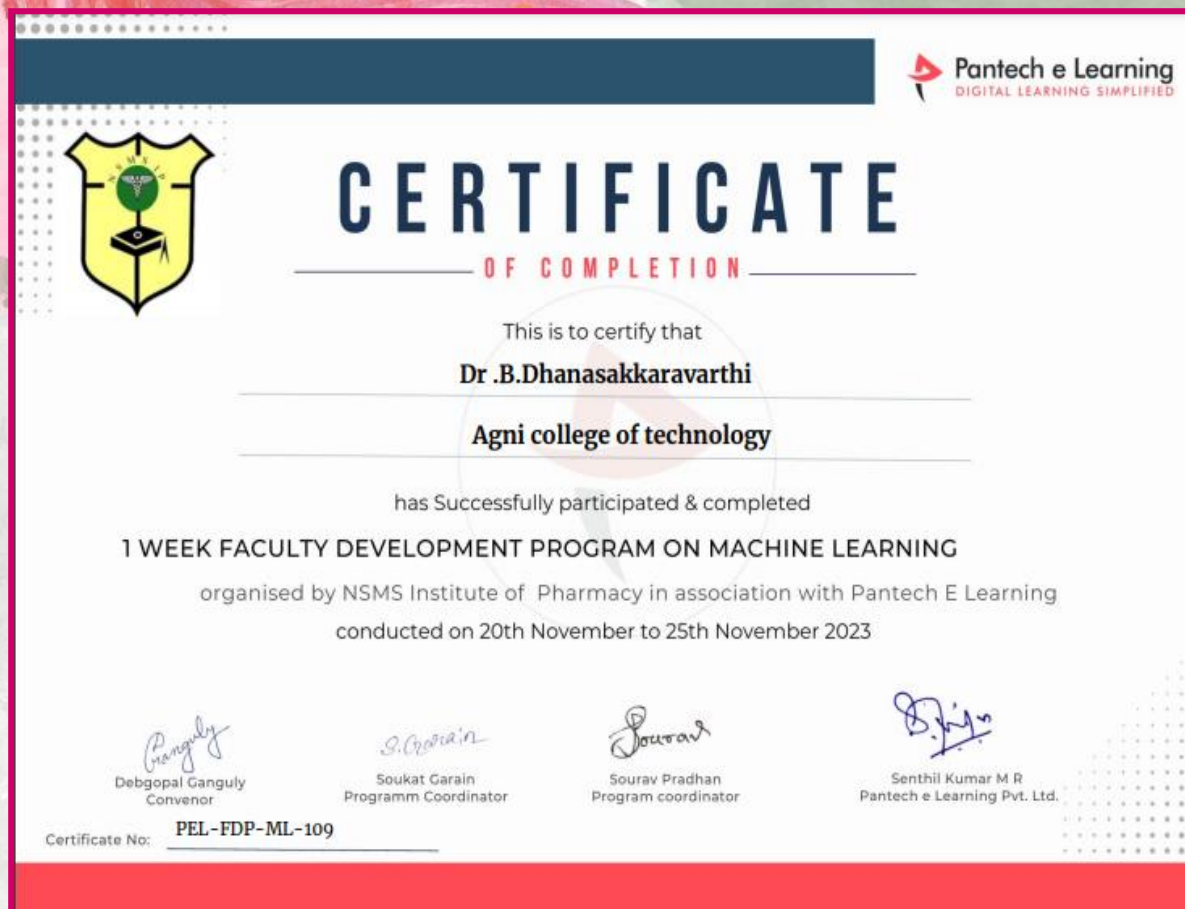
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FACULTY PARTICIPATION



Dr. B. Dhanasakkaravarthi, AP, Mechanical Engineering, has successfully participated in and completed the Faculty Development Program on “Machine Learning” from November 20th to 25th, 2023.

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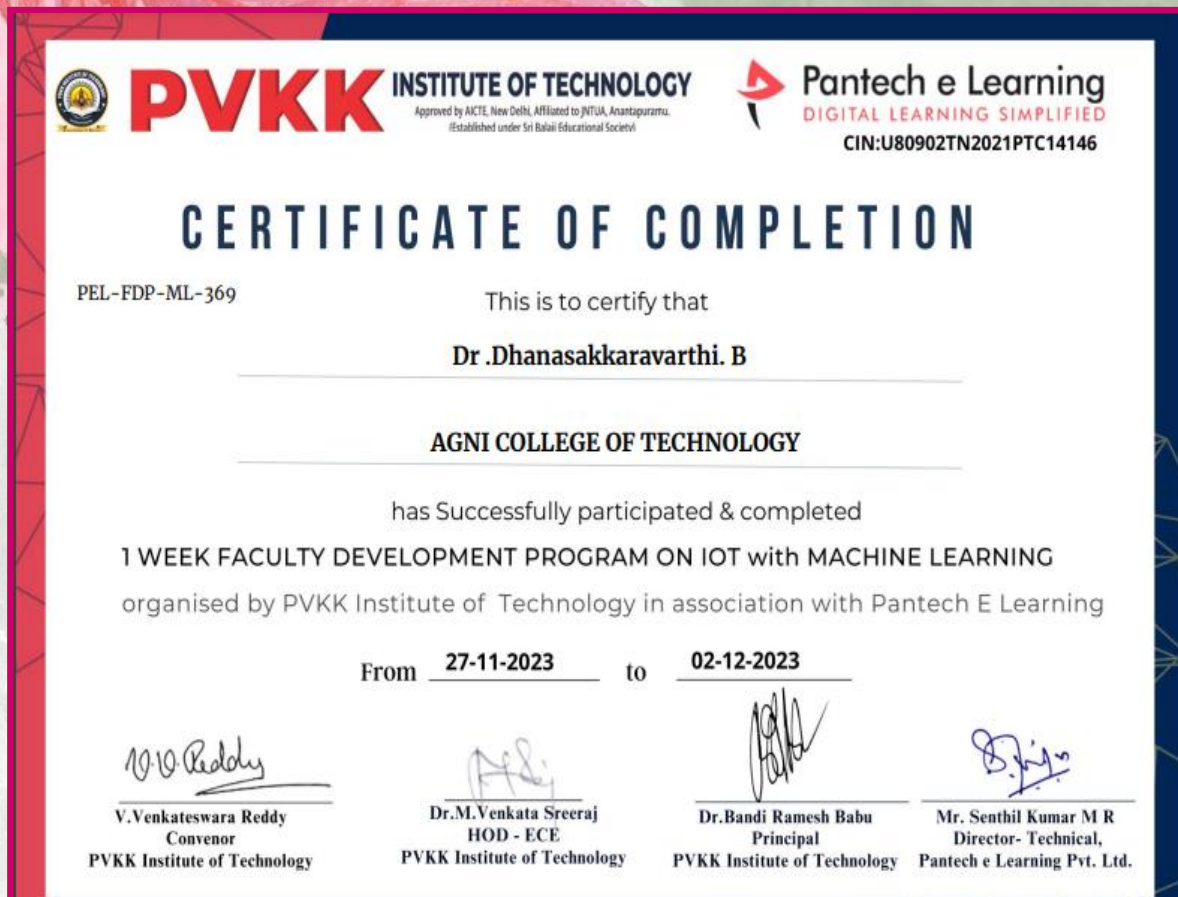


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FACULTY PARTICIPATION



Dr. B. Dhanasakkaravarthi, AP, Mechanical Engineering, has successfully participated in and completed the Faculty Development Program on "IOT with Machine Learning" from November 27 to December 2, 2023.

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FACULTY PARTICIPATION



Mrs.L.Prinslin, Assistant Professor from the Department of Computer Science and Engineering, has participated in the NPTEL E-Awareness workshop conducted by NPTEL Coordinator IIT Madras on December 12, 2023.

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FACULTY PARTICIPATION



CERTIFICATE *of Participation*



This is to certify that

SUGANYA

AGNI COLLEGE OF TECHNOLOGY

has participated in the **NPTEL** E-Awareness workshop

on December 12, 2023


Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

Mrs. A. Suganya, Assistant Professor from the Department of Computer Science and Engineering, has participated in the NPTEL E-Awareness workshop conducted by NPTEL Coordinator IIT Madras on December 12, 2023.

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FACULTY PARTICIPATION



CERTIFICATE *of Participation*



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G PRAVEEN KUMAR

AGNI COLLEGE OF TECHNOLOGY

has participated in the **NPTEL** E-Awareness workshop

on December 12, 2023

Prof. Andrew Thangaraj
NPTEL Coordinator
IIT Madras

Mr. G. Praveen Kumar, Assistant Professor from the Department of Computer Science and Engineering, has participated in the NPTEL E-Awareness workshop conducted by NPTEL Coordinator IIT Madras on December 12, 2023.

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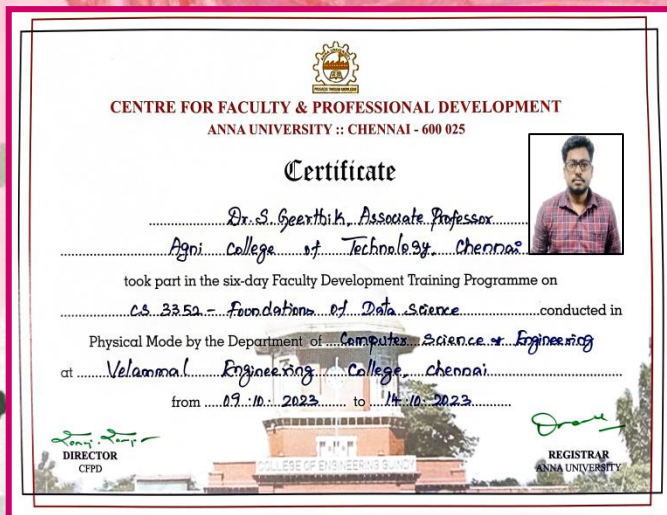


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FACULTY PARTICIPATION



The faculty members of the Information Technology Department have participated in 6-day Faculty Development Program on “**CS3352 - Foundation of Data Science**” conducted by Anna University at Velammal Engineering College from 09-10-2023 to 14-10-2023.

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STUDENT ACHIEVEMENT

AWARDED BY

be10X

CERTIFICATE

OF COMPLETION

this certificate is proudly presented to:

G.B. KIRTHICKLOCHAN



For completing the 1-Day **PowerBI** Workshop
conducted on **6th December 2023**

Aditya

ADITYA KACHAVE
CO-FOUNDER

Aditya Goenka

ADITYA GOENKA
CO-FOUNDER

G. B. Kirthicklochan, a third-year student in the Department of Mechatronics Engineering, successfully completed a **Power BI workshop** on December 6, 2023, provided by **be10X** Educational Platform. He understood the features and capabilities of Power BI and how to effectively use them to derive meaningful insights from data and develop skills for day-to-day professional life.

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SOP DISCUSSION MEETING



Dr. Sureka N, Head, Department of Biomedical Engineering, addressed second-year class in charge and subject handling faculty members to discuss the **“Standard Operating Procedures”** to be followed for II-year coaching classes from December 14th to December 28th, 2023.

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DEPARTMENT MEETING

Dr. Arul Kulandaivel, Head of the Department of Science and Humanities, conducted the faculty member meeting in the physics lab on 12.12.2023. The agenda of the meeting includes the preparation of necessary files for the DARM meeting, the effective conduct of coaching classes and university practical exams, portion completion for IAT-II, parent-teacher meetings, university question banks, skill rack training, lab completion, and mentor files.

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DEPARTMENT MEETING



Dr. S. Geerthik, Head of the IT Department, conducted a department meeting with IT faculty members on December 14-12-2023 and discussed API, Faculty Publication, Student Academics, and on-going II-year coaching class status.

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CLASS COMMITTEE MEETING



The Department of Civil Engineering held a class committee meeting for II-year students on December 13, 2023. Mrs. R. Beaula Jasmine, Head, addressed and documented the students grievances, syllabus coverage, and also suggested effective ways to use the coaching class.

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STUDENT REPOSITORY



Jeron Jeba Jose J., a second-year student in the Department of Mechatronics Engineering, has expressed his fine talent for **Scratch-Built** using foam boards and developing fantastic models for automobiles with his creativity skills.

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STUDENT ACTIVITY

UNIT-3 DESCRIBING RELATIONSHIPS

1. LINEAR RELATIONSHIP:-
 $y = mx + b \rightarrow (1)$
 Where,
 • m - slope
 • b - y intercept
 In this equation, x and y are two variables which are related by the parameters m & b.
 $m = (y_2 - y_1) / (x_2 - x_1) \rightarrow (2)$

COMPUTATIONAL FORMULA FOR CORRELATION
 $r = \frac{SP_{xy}}{\sqrt{SS_x SS_y}} \rightarrow (1)$ Where, two
 sum of square terms in denominator are,
 $SS_x = \sum (x - \bar{x})^2 = \sum x^2 - \frac{(\sum x)^2}{n} \rightarrow (2)$
 $SS_y = \sum (y - \bar{y})^2 = \sum y^2 - \frac{(\sum y)^2}{n} \rightarrow (3)$
 THE SUM OF PRODUCTS IN NUMERATOR, SP_{xy} , is:
 $SP_{xy} = \sum (x - \bar{x})(y - \bar{y}) = \sum xy - \frac{(\sum x)(\sum y)}{n}$

5. CALCULATION OF r: COMPUTATION FORMULA:-
 $r = \frac{n(\sum xy) - (\sum x)(\sum y)}{\sqrt{(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2)}}$

4. REGRESSION LINE: 1. SIMPLE LINEAR:
 $y = a + bx + u$
2. MULTIPLE LINEAR REGRESSION:
 $y = a + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_kx_k + u$
 A SIMPLE NONLINEAR REGRESSION IS EXPRESSED AS:
 $y = f(x, \beta) + E$

5. LEAST SQUARE REGRESSION LINE:
 $y' = bx + a$
 To solve for b, $b = r \sqrt{\frac{SS_y}{SS_x}} \rightarrow (1)$
 To solve for a, $a = \bar{y} - b\bar{x} \rightarrow (2)$

6. STANDARD ERROR OF ESTIMATE (SEE):
 $SE_y|x = \sqrt{\frac{SS_y}{n-2}} = \sqrt{\frac{\sum (y - y')^2}{n-2}} \rightarrow (1)$
 STANDARD ERROR OF ESTIMATE (COMPUTATION FORMULA) IS GIVEN AS:
 $SE_y|x = \sqrt{\frac{SS_y(1-r^2)}{n-2}} \rightarrow (2)$ Where, SS_y is the sum of the squares for y scores.
 $SS_y = \sum (y - \bar{y})^2 = \sum y^2 - \frac{(\sum y)^2}{n} \rightarrow (1)$

7. STANDARD DEVIATION FORMULA FOR POPULATION:
 $\sigma = \sqrt{\frac{\sum (x - \mu)^2}{N}} \rightarrow (1)$

8. STANDARD DEVIATION FORMULA FOR SAMPLE:
 $s = \sqrt{\frac{\sum (x - \bar{x})^2}{n-1}} \rightarrow (1)$

9. COMPUTE THE STANDARD ERROR OF ESTIMATE
 $SEE = \frac{\text{STANDARD DEVIATION}}{\sqrt{\text{NUMBER OF MEASUREMENTS}}} \rightarrow (1)$

10. INTERPRETATION OF r^2
 $r^2 = \frac{SSy'}{SSy} = \frac{SSy - SSy|x}{SSy}$
 Where, $SSy = \sum (y - \bar{y})^2$

11. CALCULATE R-SQUARED:
 $r^2 = \frac{[n\sum xy - (\sum x)(\sum y)]^2}{(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2)}$

12. MULTIPLE REGRESSION EQUATION:
 $y = mx_1 + mx_2 + mx_3 + b$

13. THE LEAST SQUARED REGRESSION EQUATION:
 $y = bx + a$
 where,
 • y represents the predicted value.
 • x represents the known value.
 • a and b represents numbers calculated from the original correlation analysis.

AL Razina Jafeena T. and Chandini R. II year students from the Department of Computer Science and Engineering have done an activity on describing data and describing relationships in the subject Foundation of Data Science on 13.12.2023.

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