



**ANNAMACHARYA INSTITUTE OF TECHNOLOGY & SCIENCES**

(AUTONOMOUS)

UTUKUR (P), C. K. DINNE (V&M), KADAPA, YSR DIST.

Approved by AICTE, New Delhi & Affiliated to JNTUA, Anantapuramu.

Approved by S.B.T.E.T. Andhra Pradesh.

Accredited by NAAC with 'A' Grade, Bangalore & NBA (EEE, ECE & CSE).



NOV - 2025

**Workshop**

on

**“The New Era of Quantum Computing  
in  
Science & Engineering”**



**III B. Tech  
Batch : 2023-2027**



**Date  
17<sup>th</sup> to 22<sup>nd</sup>  
Nov 2K25**

**Department of  
Computer Science & Engineering**



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### Department of Computer Science & Engineering

Organized

Six Day Workshop

on

“The New Era of Quantum Computing in Science and Engineering”

A brief

REPORT

#### Resource Persons:

<b>DAY 1 &amp; 2:</b> (17/11/2025-18/11/2025)	<b>DAY 3 &amp; 4:</b> (19/11/2025-20/11/2025)	<b>DAY 5 &amp; 6:</b> (21/11/2025-22/11/2025)
Dr. S. Kusuma Head of the Department Department of CSE (DATA SCIENCE) MITS, Madanapalle	Dr. Suresh Kallam Professor JAIN (Deemed to be university), Bangaluru.	Mr. M.P. Karthikeyan, Assistant Professor, Department of CS & IT, JAIN (Deemed to be University), Bangalore.

#### Program Details:

Date :	17/11/2025 - 22/11/2025
Participants:	III CSE Students(2023 BATCH)
No. of participants:	207

#### About Workshop:

Annamacharya Institute of Technology & Sciences (Autonomous), Kadapa successfully organized a Six-Day Workshop on “The New Era of Quantum Computing in Science and Engineering”. The event was conducted by the Department of Computer Science & Engineering from 17/11/2025 to 22/11/2025.

## Objectives:

The objective of this workshop is to introduce Quantum Computing as the next frontier in computation while providing an applied understanding of its fundamental principles. It aims to equip students with practical knowledge of qubit operations, quantum circuits, and core quantum algorithms through hands-on exposure to simulation tools, enabling them to bridge theoretical concepts with real-world computational problems.

## Outcomes:

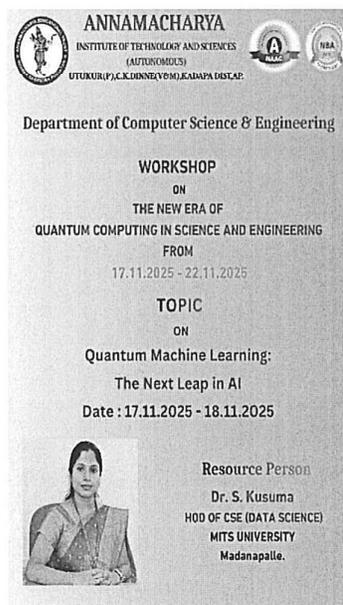
Upon completion of the workshop, students will gain a clear understanding of the foundations and significance of quantum computing, develop the ability to work with basic quantum circuits and algorithms using simulation platforms, and acquire the skills needed to analyze and apply quantum computing techniques to practical problem-solving and emerging applications in science and engineering.

## List of Topics Discussed:

Day 1. Quantum Computing: The Next Frontier in Computation

Day 2. Quantum Computing: An Applied Approach

Day 3. Exploring Quantum Computing: Simulation Tools and Fundamental Algorithms



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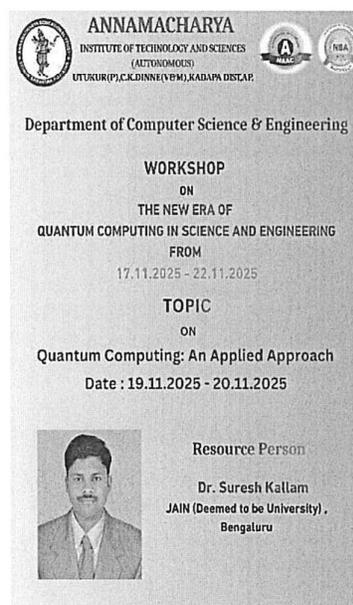
Department of Computer Science & Engineering

**WORKSHOP**  
ON  
THE NEW ERA OF  
QUANTUM COMPUTING IN SCIENCE AND ENGINEERING  
FROM  
17.11.2025 - 22.11.2025

**TOPIC**  
ON  
Quantum Machine Learning:  
The Next Leap in AI  
Date : 17.11.2025 - 18.11.2025



**Resource Person**  
Dr. S. Kusuma  
HOD OF CSE (DATA SCIENCE)  
MITS UNIVERSITY  
Madanapalle.



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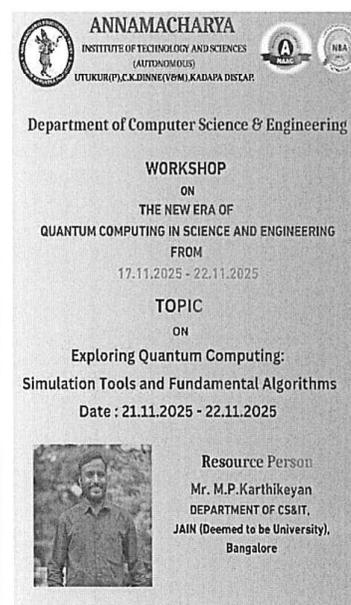
Department of Computer Science & Engineering

**WORKSHOP**  
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FROM  
17.11.2025 - 22.11.2025

**TOPIC**  
ON  
Quantum Computing: An Applied Approach  
Date : 19.11.2025 - 20.11.2025



**Resource Person**  
Dr. Suresh Kallam  
JAIN (Deemed to be University),  
Bengaluru



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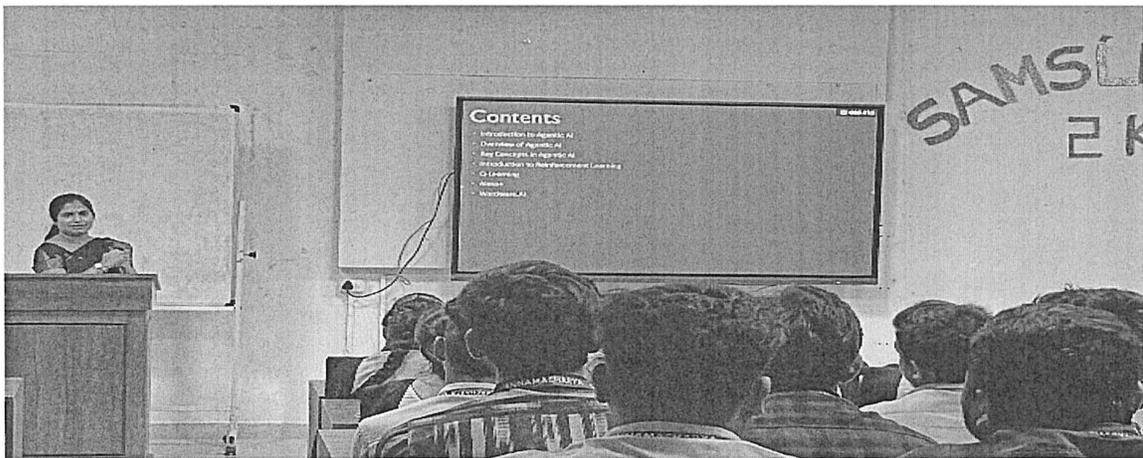
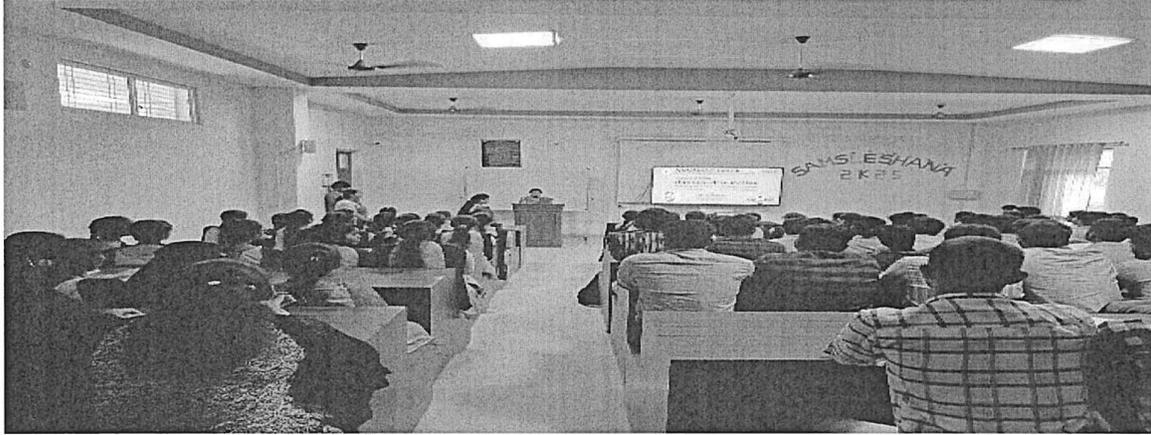
**WORKSHOP**  
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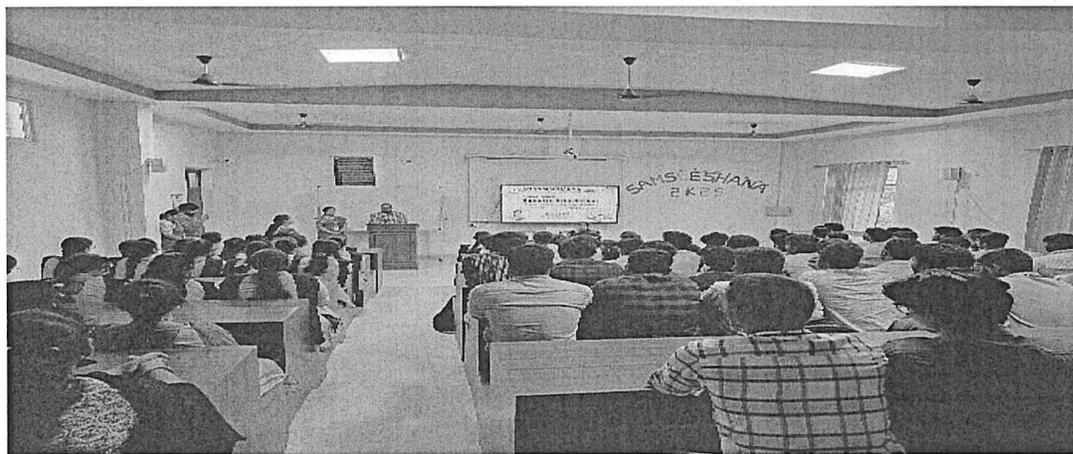
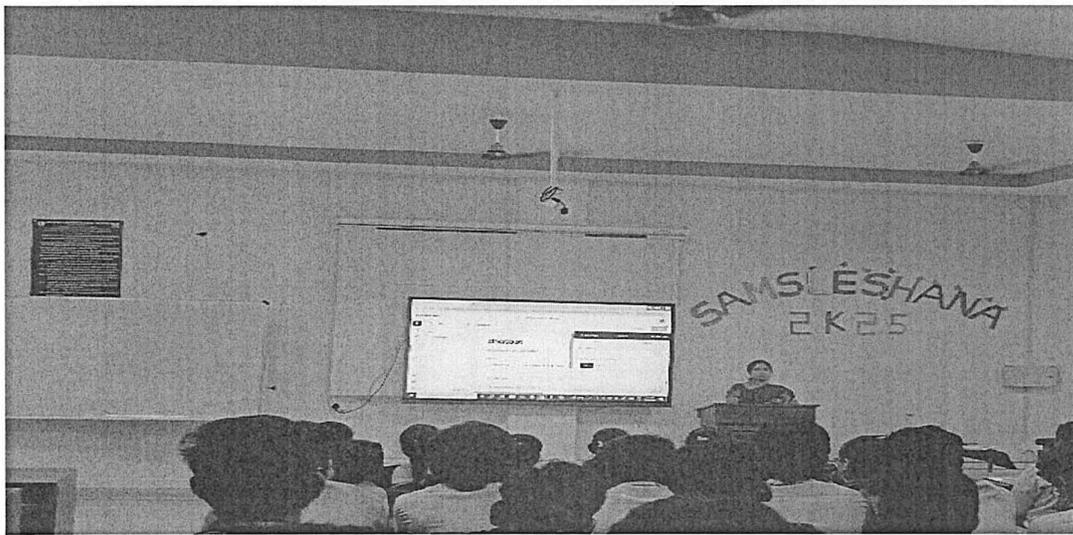
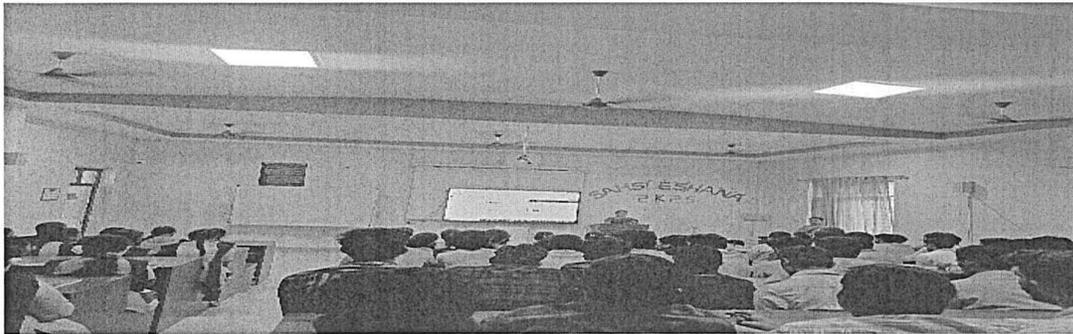
**TOPIC**  
ON  
Exploring Quantum Computing:  
Simulation Tools and Fundamental Algorithms  
Date : 21.11.2025 - 22.11.2025

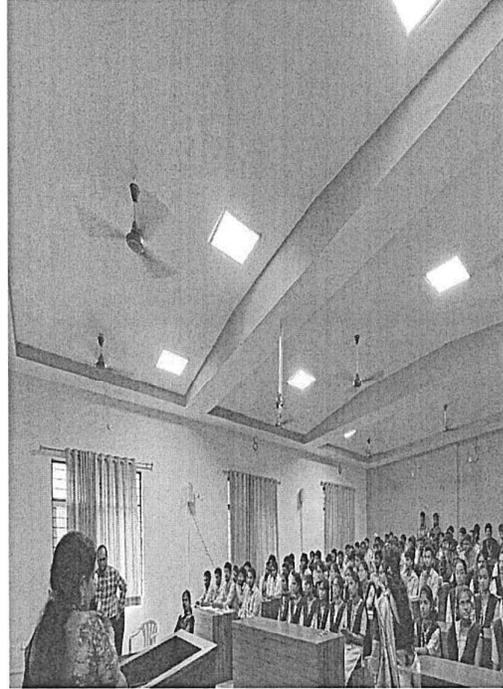


**Resource Person**  
Mr. M.P. Karthikeyan  
DEPARTMENT OF CS&IT,  
JAIN (Deemed to be University),  
Bangalore

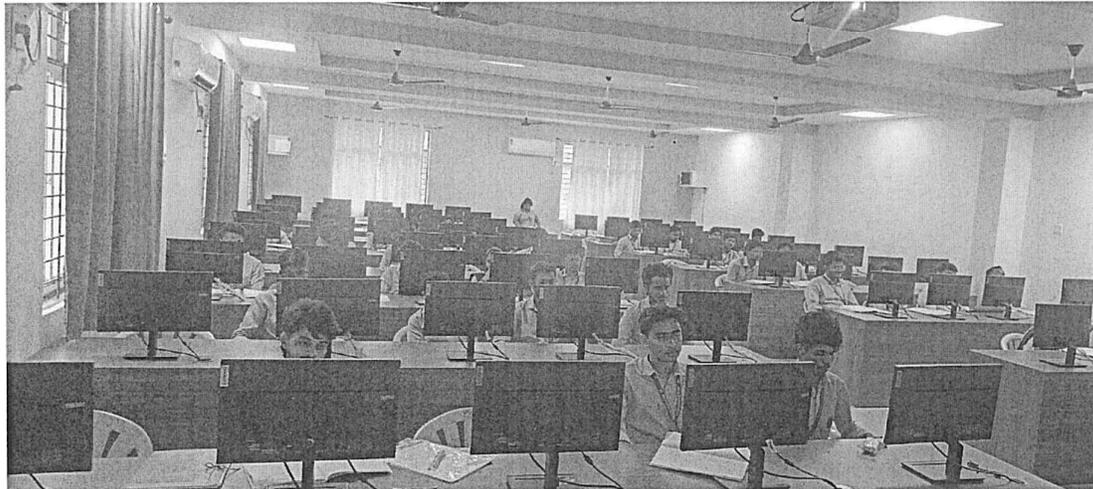
## Photo Gallery of Workshop

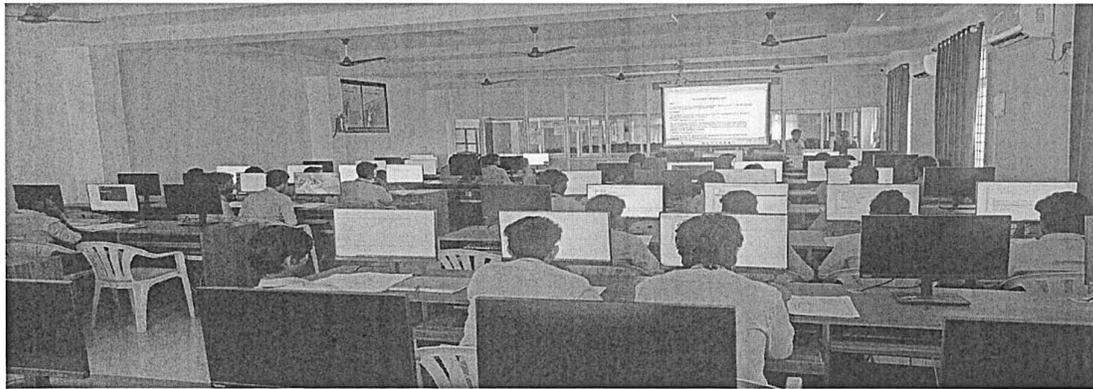
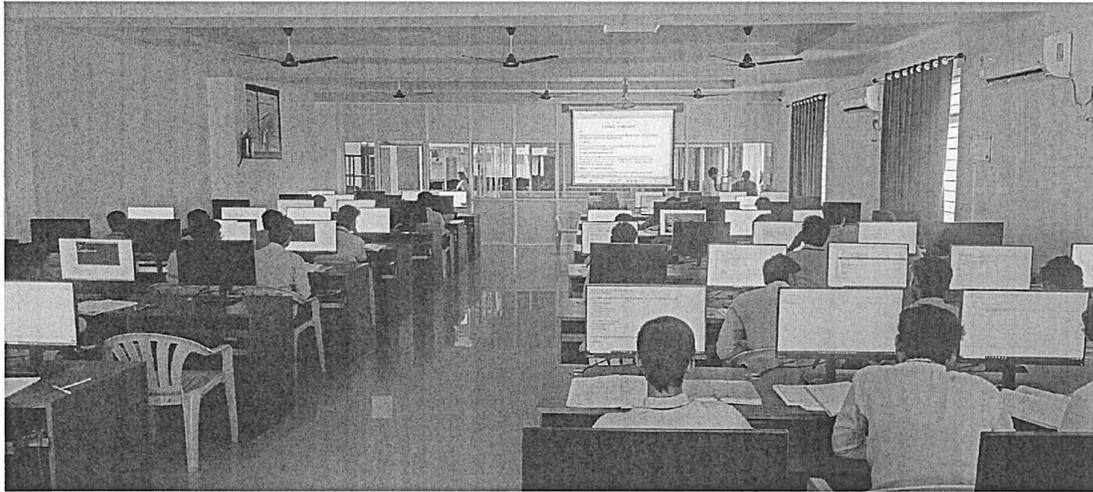
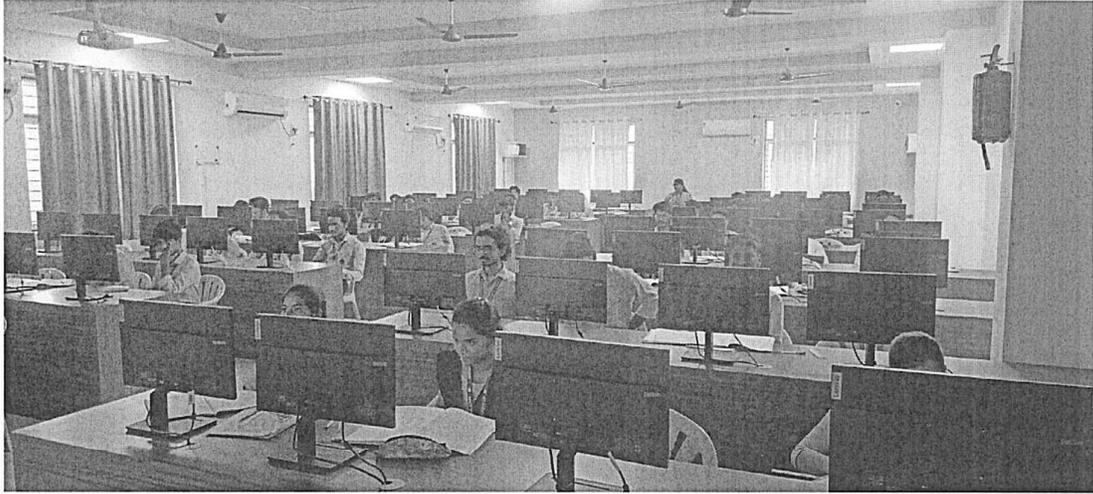






**Practical's on Workshop**





## Appreciation Certificates for Resource Persons



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**CERTIFICATE**

THIS CERTIFICATE IS PROUDLY PRESENTED TO

*Dr. S. Kusuma*

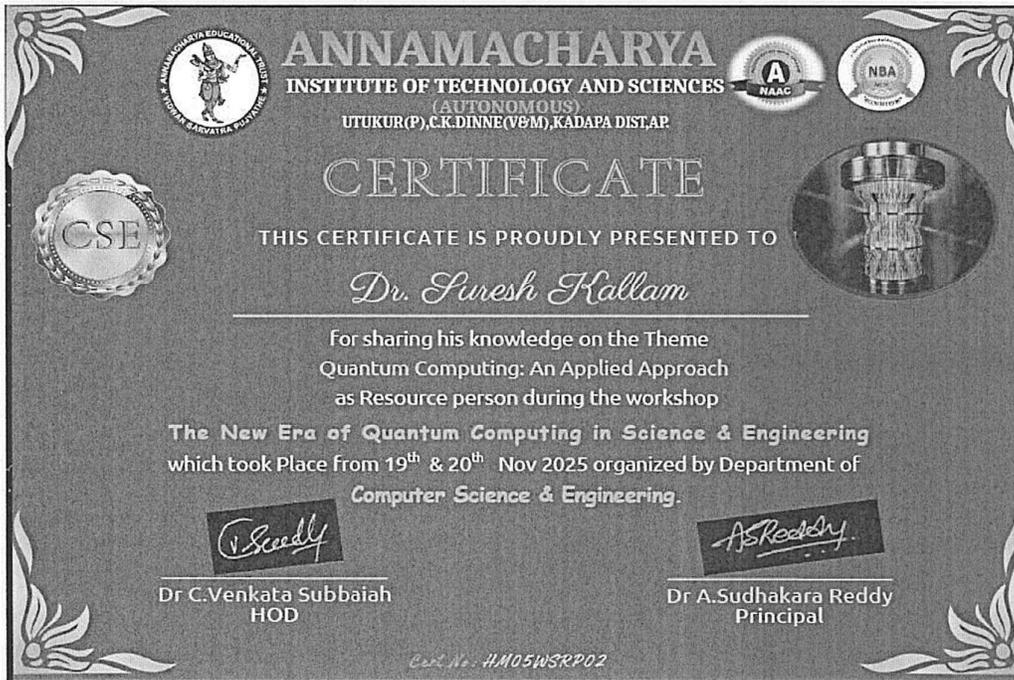
For sharing her knowledge on the Theme  
Quantum Machine Learning: The Next Leap in AI  
as Resource Person during the Workshop

**The New Era of Quantum Computing in Science & Engineering**  
which took Place from 17<sup>th</sup> & 18<sup>th</sup> Nov 2025 organized by Department of  
**Computer Science & Engineering.**

*V. Seedly*  
Dr C.Venkata Subbaiah  
HOD

*AS Reddy*  
Dr A.Sudhakara Reddy  
Principal

*Cert. No: HM05WSRP01*



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**CERTIFICATE**

THIS CERTIFICATE IS PROUDLY PRESENTED TO

*Dr. Suresh Kallam*

For sharing his knowledge on the Theme  
Quantum Computing: An Applied Approach  
as Resource person during the workshop

**The New Era of Quantum Computing in Science & Engineering**  
which took Place from 19<sup>th</sup> & 20<sup>th</sup> Nov 2025 organized by Department of  
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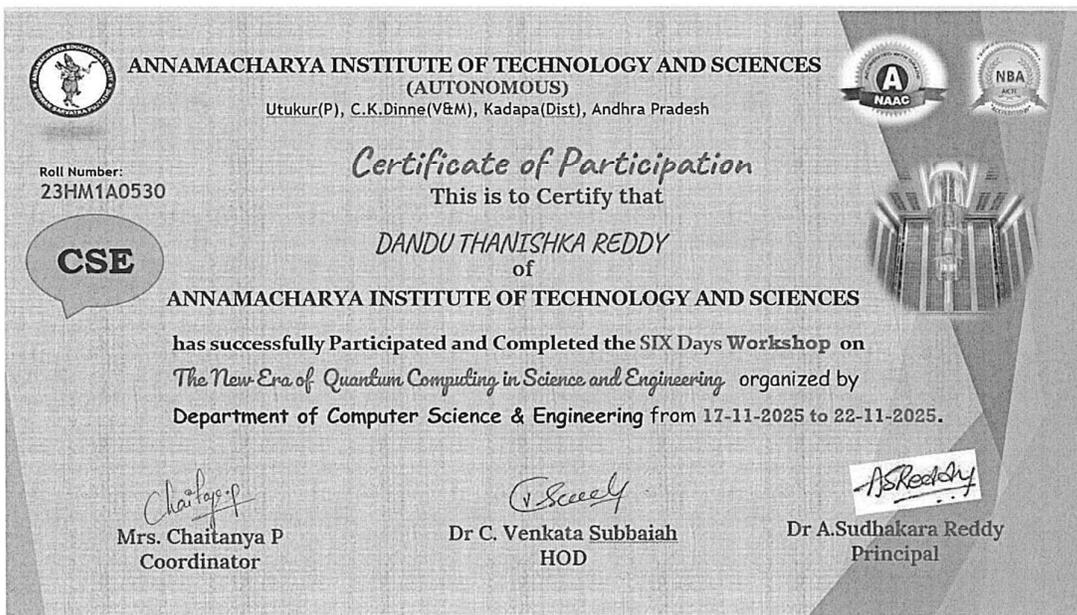
*V. Seedly*  
Dr C.Venkata Subbaiah  
HOD

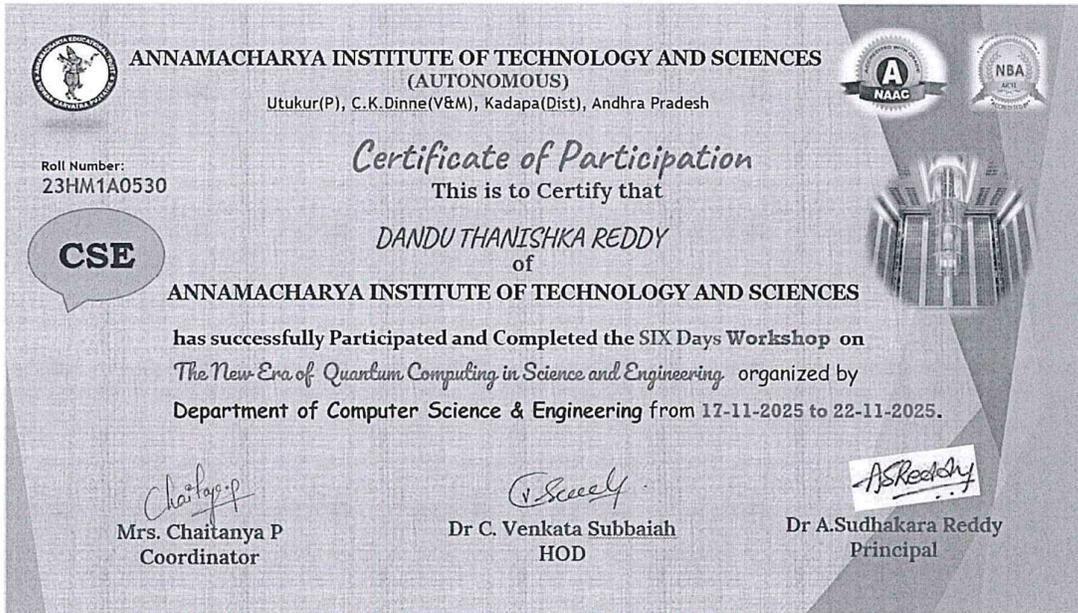
*AS Reddy*  
Dr A.Sudhakara Reddy  
Principal

*Cert. No: HM05WSRP02*



**Student participation Certificates**





### Conclusion:

By exploring quantum computation as an emerging frontier, practicing with simulation tools, and understanding fundamental algorithms, students gain valuable insights into the practical potential of quantum technologies. The knowledge and skills acquired through this workshop prepare participants for advanced learning, research opportunities, and future careers in quantum computing and related interdisciplinary fields.

HOD

(Dr. C. Venkata Subbaiah)

PRINCIPAL

(Dr. A. Sudhakara Reddy)