



LAKIREDDY BALIREDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)

L B Reddy Nagar, Mylavaram, Krishna District, Andhra Pradesh-52123

Affiliated to JNTUK, Kakinada & Approved by AICTE, New Delhi.

Department of Computer Science and Engineering (AI & ML)

Event Report

Guest Lecture On

Generative AI in the Cloud: Revolutionizing Content, Code, and Computation

Organized by:

Department of CSE (Artificial Intelligence and Machine Learning)

Lakireddy Bali Reddy College of Engineering (Autonomous)

The Department of CSE (AI & ML) at Lakireddy Bali Reddy College of Engineering organized a two-session online guest lecture on Generative AI in the Cloud on 12th August 2025. The talk covered foundational aspects of AWS cloud, generative AI concepts, and advanced practices in code, computation, and collaboration. The second session also included a practical introduction to Git and GitHub repositories for collaborative software development. The sessions were tailored for II and III Year students of CSE (AI & ML), providing both theoretical understanding and practical exposure.

Participants gained knowledge of cloud-based AI services, generative AI workflows, MLOps, security best practices, and version control using Git & GitHub.

Date & Venue

- **Date:** 12th August 2025
- **Mode:** Online
- **Organized by:** Department of CSE (AI & ML)

Organizing Committee

- **Convener:** Dr. S. Jayaprada, Head of the Department, CSE – AI & ML
- **Faculty Coordinators:**
 - Dr. Dr. B.Srinivasa Rao, Professor
 - Mr. Ch. Johnwesily, Assistant Professor

Resource Person

Name: Mr. G. Srinivasa Rao,
Cloud Solution Architect,
AA Software – *Networking to Architect*, Texas, USA

Objectives of the program

- Introduce the capabilities and limitations of Generative AI in cloud environments.
- Explain AWS cloud reference architectures for AI solutions.
- Demonstrate content generation, code generation, and compute optimization.
- Discuss responsible AI, governance, and security.
- Provide guidance on Git and GitHub for project collaboration.
- Inspire students towards industry-relevant skills and certifications.

Topics Covered

Topics covered in Session I — Foundations & Generative AI in Cloud

- **AWS Cloud Practitioner Essentials**
 - Valuating AWS Cloud Capabilities.
 - Shared Responsibility Model Insights.
 - Security Best Practices Framework.
 - AWS Economics: Billing & Optimization.
 - Comprehending AWS Global Infrastructure.
- **Course Objectives in Cloud & AI**
 - AWS Cloud Foundation Mastery.
 - AI Practitioner Certification Preparation.
 - Exploration of Generative AI technologies (Vibe coding, Agent-AI interactions).
- **Domain 2: Generative AI Concepts**
 - Fundamentals of Generative AI (tokens, embeddings, transformers).
 - AWS Generative AI Services (Amazon Bedrock, SageMaker JumpStart).
 - Diverse Use Cases: content creation, summarization, chatbots, dynamic code generation.
 - Evaluating Pros & Cons of Generative AI (hallucinations, latency, adoption challenges).

Topics covered in Session II — Code, Computation & Collaboration

- **Programming & Frameworks**
 - Programming in Python, Java, Go, C#.
 - API lifecycle management (authentication, authorization, versioning).
 - AWS Lambda, S3, API Gateway, DynamoDB, CloudWatch.
 - RESTful API management and NoSQL database solutions.
- **DevOps, CI/CD & Containerization**
 - DevOps methodologies and infrastructure automation.
 - CI/CD tools: AWS CodePipeline, Jenkins, GitHub Actions.
 - Infrastructure as Code (IaC) with Terraform & CloudFormation.
 - Docker & Kubernetes for scalable deployments.
- **Hands-on with Git & GitHub**
 - Creating repositories.
 - Cloning, committing, and pushing changes.

- Branching and team collaboration.
- Best practices in version control for AI/ML projects.

Key Outcomes

After the lecture, participants were able to:

- Understand AWS Cloud Practitioner core domains.
- Describe generative AI concepts, services, and applications.
- Recognize AWS-based tools for AI/ML projects.
- Understand security and governance best practices in cloud projects.
- Use Git & GitHub for effective project collaboration.

Feedback

Students of II and III year CSE – AI & ML found the lecture very insightful and practical. They appreciated the clear explanation of **cloud and generative AI concepts** along with real-time demonstrations. The session on **Git and GitHub** was especially helpful in building collaborative coding skills. Overall, the lecture motivated them to explore new tools, pursue certifications, and apply these learnings in projects.

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L.B. Reddy Nagar, Mylavaram, N.T.R. District, Andhra Pradesh-521230

Department of CSE – Artificial Intelligence and Machine Learning

Organising

Guest lecture on

**Generative AI in the Cloud:
Revolutionizing Content, Code, and
Computation**

Speaker
Mr. G. Srinivasa Rao
Cloud Solution Architect
AA Software Networking to Architect
Texas, USA

DATE
12, AUG, 2025

TIME
10 AM TO 12 PM

Course Objectives

Building Foundational Expertise in Cloud and AI

AWS Cloud Foundation Mastery

Participants will cultivate a robust understanding of the AWS Cloud landscape, culminating in the AWS Certified Cloud Practitioner certification, which serves as a pivotal first step in cloud literacy.

AI Practitioner Certification Preparation

By delving into advanced AI concepts, learners will acquire necessary skills and knowledge to succeed in the AWS Certified AI Practitioner exam, enabling them to validate their expertise in AI and cloud.

Exploration of Generative AI Technologies

The curriculum incorporates a comprehensive investigation into the world of generative AI, including techniques like Vibe Coding and Agent-AI interactions, ensuring readiness for emerging careers in AI-driven roles.

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Venkata Gbharika Prathi...

Vishnu priya Nalajala

Warheq Ali Shaik Moha...

Tasawarhi Marnrepalli

SrinivasRao Gurram (Presenting)

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SrinivasRao Gurram (Presenting)

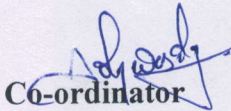
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Co-ordinator


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HEAD OF THE DEPARTMENT
COMPUTER SCIENCE AND ENGINEERING (AI & ML)
LAKIREDDY BALIREDDY COLLEGE OF ENGINEERING
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