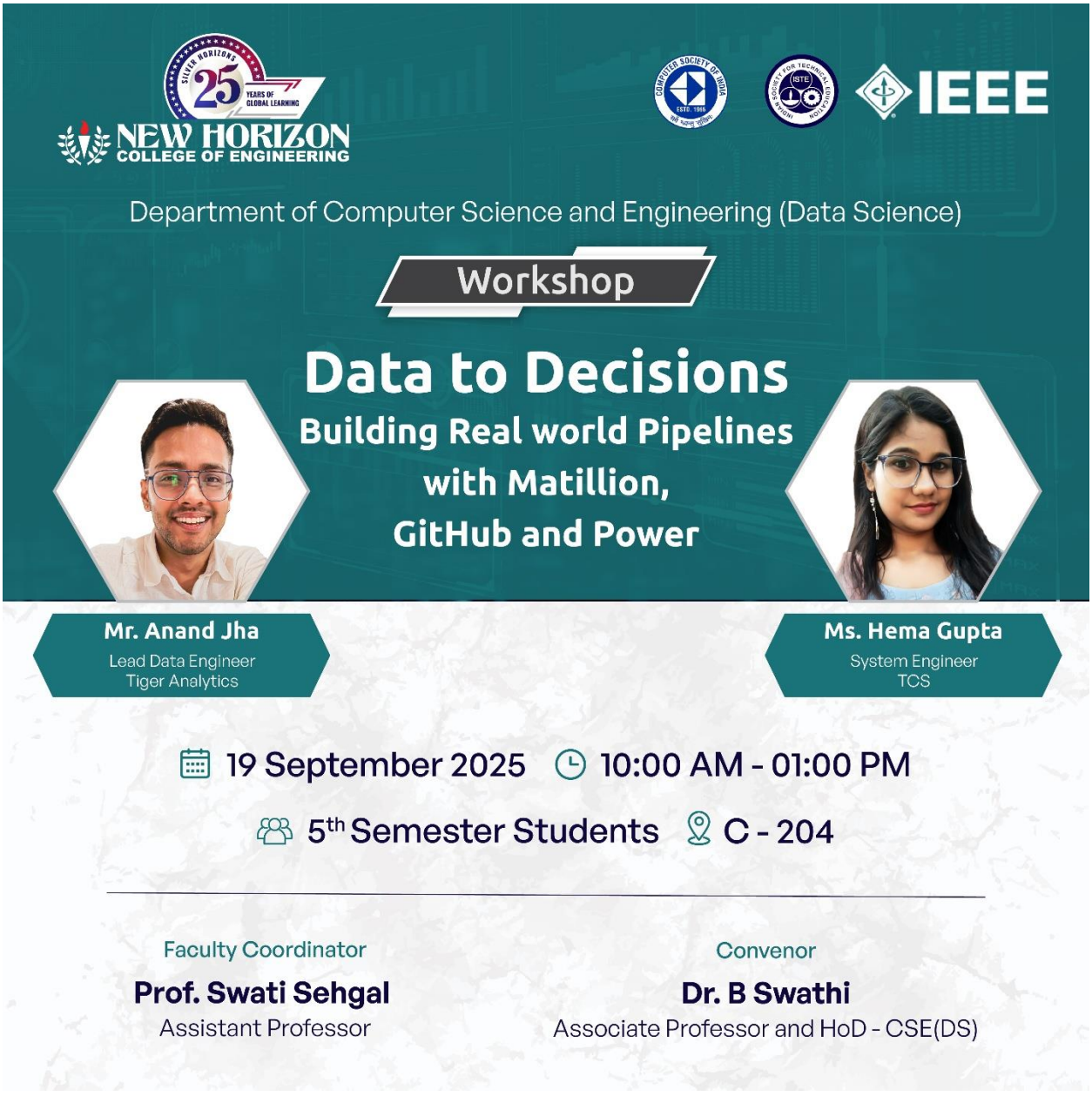
NEW HORIZON COLLEGE OF ENGINEERING

DEPARTMENT OF CSE - DATA SCIENCE

Event: "BUILDING REAL WORLD PIPELINES WITH MATILLION, GITHUB AND POWERBI"

Venue: Room C204 **Time-10:00 AM-1:00PM**



On **19th September 2025**, the **Department of Computer Science and Engineering (Data Science)** at **New Horizon College of Engineering** organized a technical workshop titled **"Data to Decisions: Building Real-world Pipelines with Matillion, GitHub, and Power"** exclusively for **5th semester students**. The workshop was conducted by **Mr. Anand Jha, Lead Data Engineer at Tiger Analytics**, and assisted by **Ms. Hema Gupta, System Engineer at TCS**.

The session was designed with the objective of bridging the gap between classroom learning and industry practices, focusing on **modern data engineering workflows** and **decision-making through analytics**. It emphasized hands-on learning, ensuring students not only understood theoretical concepts but also gained practical exposure to widely used tools like **Snowflake, Matillion, GitHub, and Power BI**

The workshop began with an engaging introduction by **Mr. Anand Jha**, who shared his expertise and real-world experiences in data engineering. He explained the importance of building efficient **data pipelines** in today's data-driven organizations and how companies rely on them for consistency, scalability, and accuracy in decision-making.

He then introduced the students to **Snowflake**, a powerful cloud-based data warehousing platform. Through a **step-by-step, guided demonstration**, he explained how Snowflake can be used to store, manage, and process large volumes of structured and semi-structured data. Students were encouraged to actively follow along, creating their own Snowflake environments and performing basic operations to understand its functionality.

Following this, **Mr. Anand Jha moved on to Matillion**, an advanced ETL (Extract, Transform, Load) tool. He provided a detailed walkthrough of how Matillion integrates with Snowflake to design and automate data pipelines. Students learned how to extract data from multiple sources, transform it using various techniques, and load it into the Snowflake environment. The live demonstration ensured that participants were able to practically grasp each concept, making the learning process interactive and effective.

To complete the pipeline journey, **Mr. Anand Jha introduced Power BI**. He explained how this business intelligence tool could be used to visualize the data stored in Snowflake, turning raw numbers into **meaningful dashboards and actionable insights**. By the end of this segment, students were able to see the **complete flow of data** — from ingestion and transformation (via Snowflake and Matillion) to visualization and decision-making (via Power BI).

During the hands-on sessions, **Ms. Hema Gupta played a key role in assisting students**, ensuring they were able to apply the concepts and build their own **mini-projects on pipeline development**. She guided them individually, clarified doubts, and supported participants in overcoming technical challenges. Her assistance ensured that the workshop remained inclusive and every student was able to gain confidence in working with the tools.

The **interactive format**, with a blend of explanations, demonstrations, and real-time practice, made the workshop highly engaging. Students particularly appreciated the **step-**

by-step guidance by Mr. Anand Jha and the **one-to-one support from Ms. Hema Gupta**. The workshop gave participants:

- **Hands-on experience** with Snowflake, Matillion, and Power BI.
- The ability to **design and implement data pipelines**.
- Insights into **real-world data engineering challenges and solutions**.
- Exposure to **collaborative workflows using GitHub**.
- Motivation to explore **career opportunities in data engineering and analytics**.

The Q&A session at the end allowed students to interact with the speakers, discuss practical applications of the tools, and gain advice on career paths in the rapidly growing field of **data science and engineering**

Overall, the workshop was a resounding success, equipping the students with **industry-relevant knowledge and practical skills**. By working through **Snowflake, Matillion, GitHub, and Power BI in an end-to-end manner**, students were able to understand how raw data is transformed into meaningful insights that drive business decisions. The combined efforts of **Mr. Anand Jha's detailed instruction** and **Ms. Hema Gupta's hands-on support** ensured that the session was impactful and memorable. This workshop not only enhanced the technical expertise of the participants but also inspired them to pursue advanced learning in **data engineering and analytics**, preparing them for both academic excellence and professional success in the future.

Faculty Coordinator

Asst Prof.

SWATI SEHGAL

Convenor

HOD-CSE-DS

Dr. B SWATHI