# **Summer Training TR-103**

# **Prompt Engineering**

## **Day-6 Report**

The sixth day of the training program centred on deepening participants' understanding of Google AI Studio, with a focus on practical implementation.

### Why use Google AI Studio? (Advantages):

- More options
- Because tokens are freely available
- Comparison Mode
- Vertex: Paid version of Google AI Studio and gives better results than Google AI Studio
- OpenAI Premium Version and Vertex: Used by Developers
- Links with Google Drive:
  - o Tip: Use different accounts for Google AI Studio because Drive space limited
- Grounding with Google Search
- Streaming
- Fine Tuning Option

## **Comparison Mode:**

 Participants explored the Comparison Mode in Google AI Studio, which allows sideby-side evaluation of different AI model outputs. This feature was demonstrated to help users assess model performance, response
quality, and suitability for specific tasks, enabling informed decisions when selecting
models for projects.

### **Build:**

- The Build functionality was introduced, guiding participants through creating custom AI workflows.
- Attendees practiced constructing simple AI pipelines, combining prompts and model configurations to generate tailored outputs for specific use cases.

#### **Stream:**

- The Stream feature was highlighted, showcasing real-time output generation for interactive applications.
- Participants experimented with streaming responses to understand how Google AI
   Studio supports dynamic, low-latency interactions.

#### **Generate Media:**

- The session covered the Generate Media tool, which enables the creation of images, audio, and other media types using AI models.
- Practical exercises included generating sample media outputs, helping participants
   understand the creative potential of Google AI Studio for multimedia applications.

### **Fine-Tuning:**

 An introduction to Fine-Tuning was provided, explaining how to customize pretrained models for specific tasks.  Participants engaged in hands-on activities to fine-tune models with sample datasets, gaining insights into improving model accuracy and relevance for targeted applications.