

## **Title: Generative AI-Powered Resume Analyzer**

### **Objective:**

To demonstrate the potential of Generative AI and associated techniques in automating resume screening and do necessary pre-analysis for shortlisting. The solution should:

1. Parse and extract mandatory fields from resumes.
2. Score resumes based on the extracted data.
3. Handle batch processing of multiple resumes efficiently.
4. Output results in a structured format (Excel).

### **Requirements:**

1. **Input:**
  - A set of resumes in PDF format (preferably exposed in Google drive).
2. **Mandatory Columns to be extracted for Output:**
  - **Name**
  - **Contact details : as in the resume**
  - **University**
  - **Year of Study**
  - **Course**
  - **Discipline**
  - **CGPA/Percentage**
  - **Key Skills**
  - **Gen AI Experience Score**
  - **AI/ML Experience Score**
  - **Supporting Information** (e.g., certifications, internships, projects)
3. **Expected Deliverables:**
  - An Excel file containing the extracted data for each resume.
  - Columns should include mandatory fields and any additional insights.
  - Score can have values 1-3, where 1 – Exposed, 2 – Handson and 3- worked on advanced areas such as Agentic RAG, Evals etc. Similarly for AI/ML experience score as well.
4. **Features to Include:**
  - Use of advanced Generative AI with higher accuracy and context-aware extraction.
  - Few-shot learning for adaptability to variations in resume formats.
  - Batch processing capability for up to 100 resumes at a time.

## Evaluation Criteria:

Key differentiators if you want to get qualify – Speed, Quality, Scale, Accuracy and Creativity.

1. **Generative AI Integration:**
  - Demonstrate the use of GPT models or equivalent.
  - Showcase how solution is retrieving relevant contextual data to complement extraction.
2. **Accuracy:**
  - Accuracy of field extraction and completeness of mandatory columns.
  - Ability to handle varying formats and layouts.
3. **Batch Processing Efficiency:**
  - Demonstrate processing of multiple resumes and timely output generation.
4. **Scalability:**
  - Include creative approaches for scaling the solution for larger payloads.
  - Describe how this solution could handle resumes for higher payloads
5. **Creativity and Innovation:**
  - Innovative use of Generative AI features.
  - Additional insights or value-added features in the output file (e.g., inferred career potential, role match scores).
6. **Output Quality:**
  - Neatly formatted Excel output.
  - Logical and consistent scoring mechanism for ranking candidates.

## Submission Guidelines:

1. **Code Submission:**
  - Provide your source code in a GitHub repository or as a downloadable file.
  - Include clear instructions for running the code.
2. **Documentation:**
  - A brief explanation of your approach (PDF or markdown file).
  - Highlight the use of Generative AI and any innovative features implemented.
3. **Output File:**
  - Submit an Excel file containing results for a sample set of resumes (at least 10).
4. **Deadline:**
  - 19<sup>th</sup> Jan 2025, 10 PM IST
5. **Submission Format:**
  - Zip file containing code, documentation, and output file.
  - Or GitHub repository link with organized folders for code and output.

## Additional Notes:

- Be creative! Add features that could enhance the solution's practical utility.
- Focus on a user-friendly and efficient design.
- This assignment plays a critical role in shortlisting candidates for the internship.