

# DEPARTMENT OF APEX INSTITUTE OF TECHNOLOGY

## **PROJECT PROPOSAL**

## 1. Project Title: -

Music Genre Classification

### 2. Project Scope: - (Max 500 words)

In short, I can define my project problem statement as like given multiple audio files, and the task is to categorize each audio file in a certain category like audio belongs to Disco, hip-hop, etc. The music genre classification can be built using different approaches in which the top 3 approaches that are mostly used are listed below.

- Support vector machine
- K-Nearest Neighbors
- K-means clustering algorithm

#### 3. Requirements: -

#### ➤ Hardware Requirements

1. CPU: Quad-core Intel Core i5 or higher

2. RAM: 8GB

3. Storage: 256GB SSD

### Software Requirements

- 1. Language: Python and libraries like NumPy, Pandas, and Matplotlib
- 2. Machine Learning Algorithms: KNN, SVM and K-Means Clustering.
- 3. Development Tools: Google Collab, Jupyter Notebook, and VS Code

#### STUDENTS DETAILS

Name	UID	Signature
ANUP	20BCS3923	

#### APPROVAL AND AUTHORITY TO PROCEED

We approve the project as described above, and authorize the team to proceed.

Name	Title	Signature (With Date)
PULKIT DWIVEDI	ASSISTANT PROFESSOR	