***Project Proposal***

**2) Project Title**

**Image Detective: synthetic Image Recognizer**

**3) Background to the problem**

AI has the potential to significantly impact various aspects of the world in various ways.AI impacts the world by automating tasks to reshaping industries, job markets, and economic landscapes. Proper regulation and responsible development are crucial to harness its potential for the benefit of society. It is also used to create synthetic data which helps AI applications in various fields while maintaining data integrity and enabling ethical and privacy-preserving practices.

Synthetic image refers to artificially generated image that imitates real-world data but does not originate from actual observations or measurements. It is created using algorithms or models to simulate image that resembles the statistical properties and patterns found in real data.

So, in this new era of technology we do not know whether the image, video or any other kind of data we are viewing is real or artificially created by algorithms. This project will validate whether the image we are using or viewing is real or synthetic..

**➢ Budgets**

• No specific development budget required.

• Only server deployment expenses.

• Low-cost solution

**4) Project Scope**

The system can be used by anyone to check whether the images they are using in synthetic data either fully or partially. The main objective of this system is to separate real and synthetic image. With the advancement in Artificial Intelligence and technology, it is difficult for a common person to distinguish between images which are created by algorithms or humans. The main purpose of this system is to check whether the data being used is real or synthetic images.

The system can be of quite importance. Few of its advantages are as below

* Data Integrity
* Evaluation and Validation
* Privacy and Security
* Data Augmentation
* Ethical Considerations

Overall, separating real and synthetic data allows for better organization, evaluation, privacy protection, and ethical considerations, enabling more effective and responsible use of data in various applications.

**5) Requirements**

The project must have following initial requirements

• Real images of different domains

•Synthetic data of different domains

**2) Which of the following core modules will be used in your project build upon?**

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| Project | **WB** | **AI** | **NW** | **SE** | **DB** |
| **Image Detective: synthetic Image Recognizer** |  |  |  |  |  |